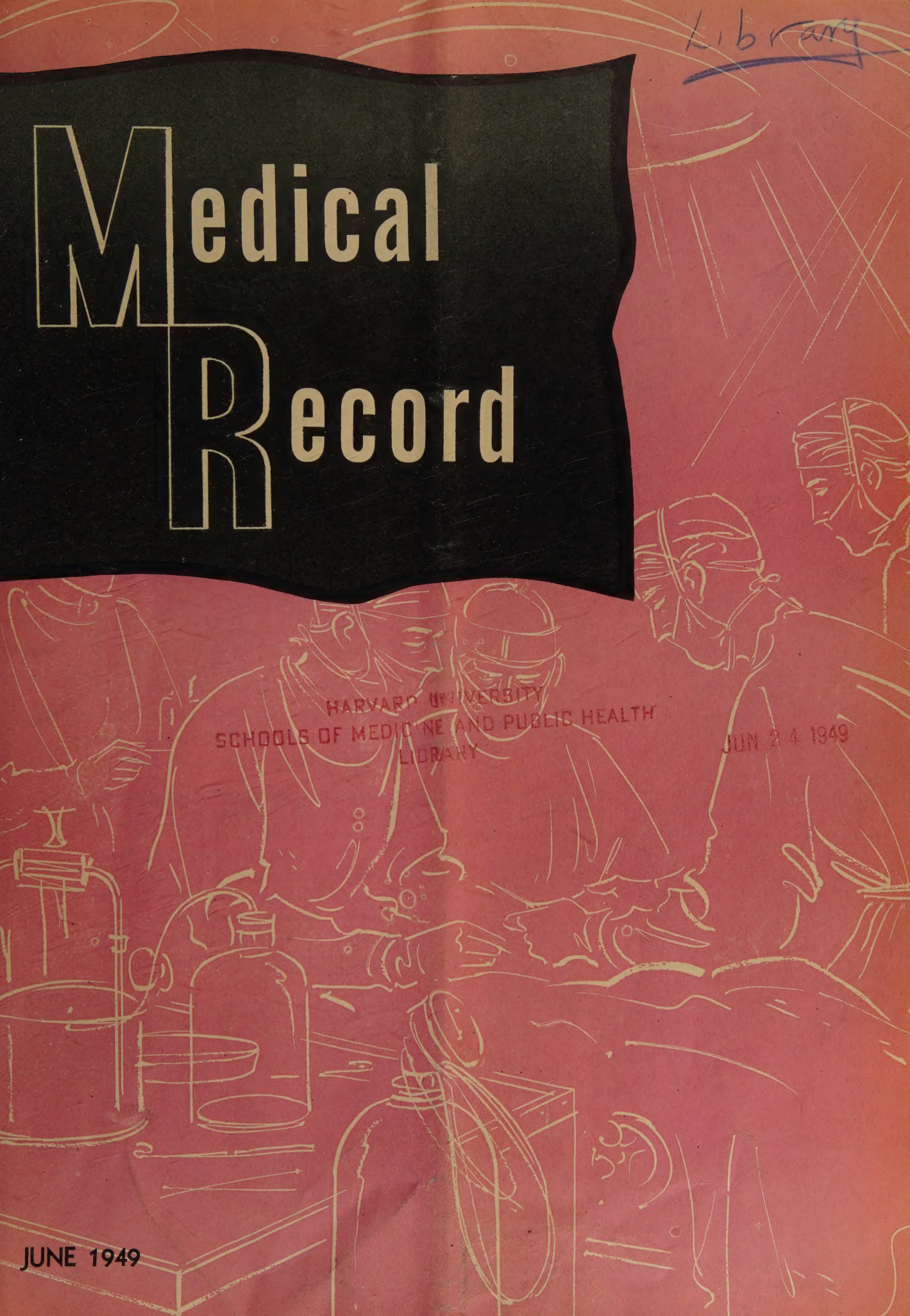
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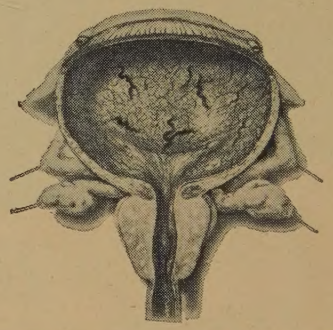

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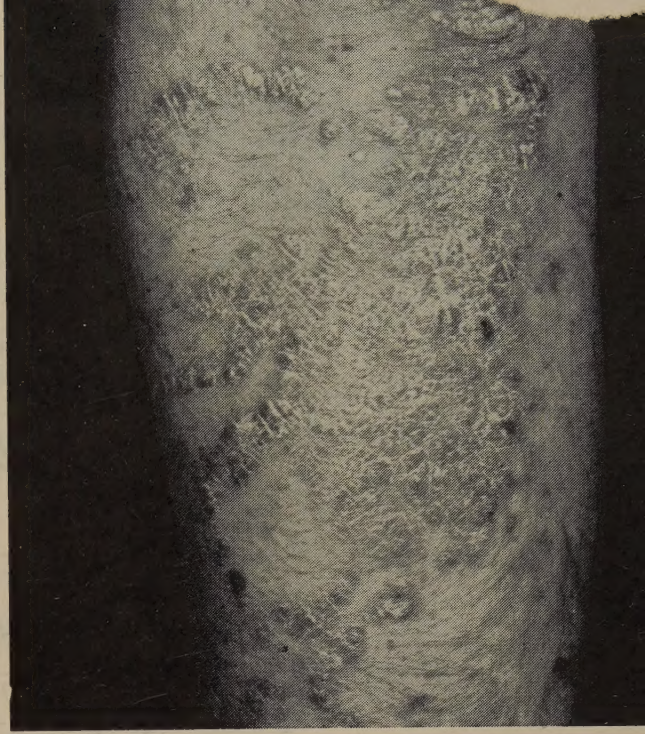

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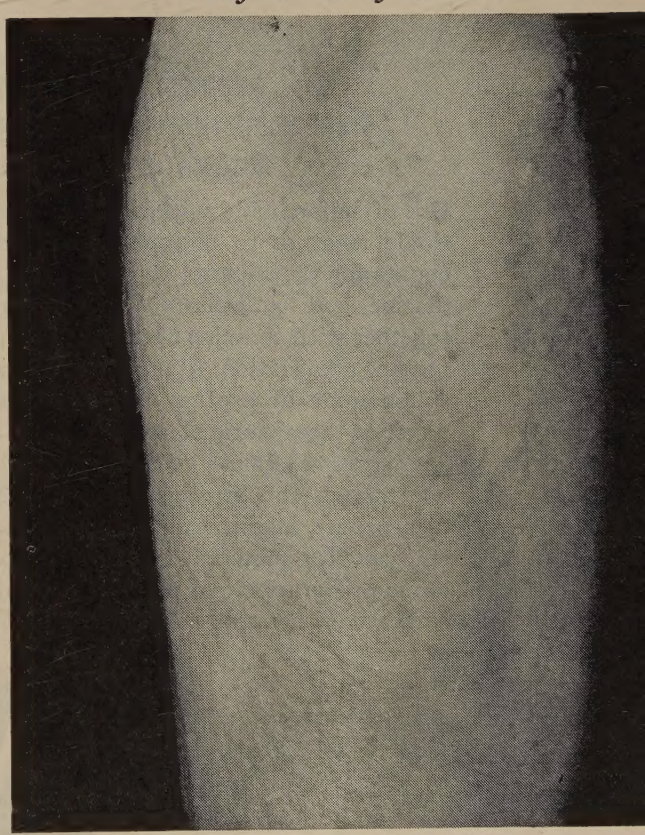

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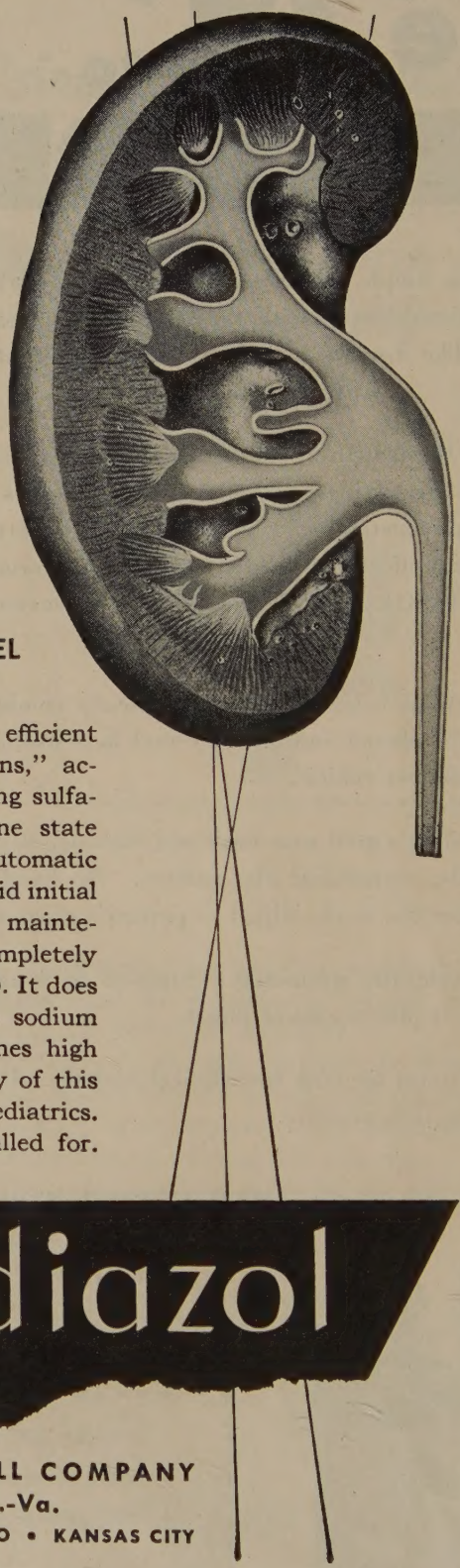

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JUNE, 1949

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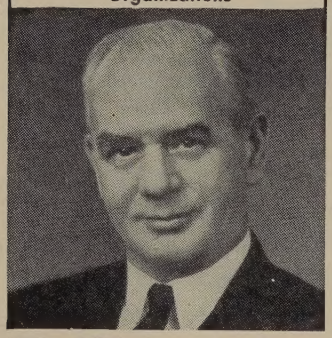

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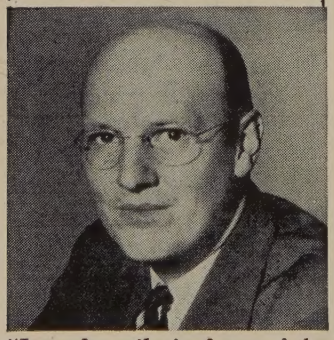

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MEDICAL NEWS

MEDICAL SCHOOL IN ISRAEL

The Hebrew University-Hadassah Medical School, the first medical school in the new state of Israel, opened on May 17 as a joint undertaking of the Hebrew University and Hadassah, the Women's Zionist Organization of American. Presently, the school is to be housed in Jerusalem in four hospital units, totalling over three hundred beds.

The initial class consists of fifty students. The degree of "Doctor of Medicine" will be conferred upon students who comply with conditions specified in the curriculum, pass the examinations and submit a thesis.

The four years of medical instruction are divided into one year of study in the basic medical sciences, two years of clinical training, one year of practical work in hospitals recognized by the faculty.

PROCTOLOGY MEETING

First meeting of the newly-formed International Academy of Proctology will be held at the Marlborough-Blenheim in Atlantic City, New Jersey, on Friday, June 10.

The scientific portion of the program will consist of the presentation of papers and motion pictures of interest to all physicians as well as those specializing in proctology.

Further information can be obtained by writing to Dr. Alfred J. Cantor, International Academy of Proctology, 43–55 Kissena Boulevard, Flushing, New York.

OFFICER CERTIFICATES

Certificates are ready for mailing to former medical officers who served during the war with the designation of Flight Surgeon.

Certificates indicate that the officers concerned were graduated from the Aviation Medical Examiner's Course given at the U. S. Air Force School of Aviation Medicine, Randolph Air Force Base, Texas. Those who are eligible to receive the certificates may secure them by writing to The Air Surgeon, Headquarters, U. S. Air Force, Washington 25, D.C.

Officers now on active duty are not eligible to receive the certificates.

RESEARCH LAB PLANS

Construction of the proposed New Sharp and Dohme Medical Research Laboratories at West Point, Pennsylvania, is expected to begin late in September, Dr. W. A. Feirer, executive vice-president, has announced. The building is expected to be ready for occupancy by the spring of 1951.

Detailed plans for the $4,000,000 building have been announced for the first time. The new brick and steel structure will contain 110,000 square feet of floor space. Four stories high, it will be built in the shape of an L east of the entrance to the present shipping and warehousing building at West Point. An enclosed bridge will connect the two buildings. Other conveniences will include an auditorium seating 250 persons, a reception room for visitors, two passenger elevators, a freight elevator.

The new building will house all research departments and, in addition, medical staff and research offices will be located there as well as the patent division and the research library.

A small one-story semi-pilot plant building behind the research building will be available to all departments for research work that requires equipment larger than laboratory size.

SYMPOSIUM ON ORTHOPEDICS

Mellon Institute will join with the University of Pittsburgh's School of Medicine in holding a second annual Symposium on Orthopedic Applicances at the Institute during the week of September 19, 1949, Institute director Dr. E. R. Weidlein has announced.

The symposium will be open to invited orthopedic physicians and surgeons as well as to selected orthopedic technologists skilled in brace design, fitting and construction. The lecture staff will give detailed attention to bracing problems in cerebral palsy, paraplegia and hemiplegia resulting from poliomyelitis and other disabling diseases, to scoliosis and related spinal conditions, and to other specialized orthopedic problems.

EXHIBIT HONORS JENNER

An exhibition honoring Edward Jenner and his discovery of vaccination is now on display in the Medical Library of the Yale University School of Medicine. The exhibit commemorates the two-hundredth anniversary of his birth.

Included are Jenner's writings, material about him and his work, translations of his work in Latin, French, German, Dutch and Russian. The display covers eighteenth century writings on smallpox inoculations and attempts to lessen the force of the disease.

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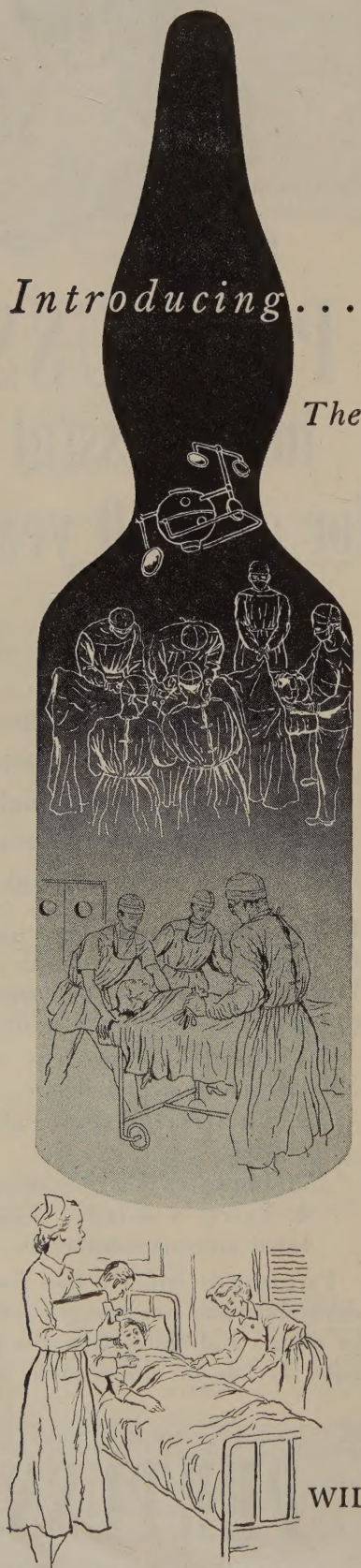

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THE BELLEVUE METHOD FOR THE TREATMENT OF CARCINOMA OF THE CERVIX

IRA I. KAPLAN, B.Sc., M.D., F.A.C.R.
New York, New York

Director, Radiation Therapy Department, Bellevue Hospital; Clinical Professor Radiology, New York University Medical College

The Bellevue Method for the treatment of carcinoma of the cervix is now, after a clinical experience of 25 years, in our opinion a definitely effective method of procedure offering the maximum amount of control of all groups of cervix cancers. This method of therapy has been employed in the treatment of 976 of the 1424 cases of cancer of the cervix observed in the Radiation Therapy Department at Bellevue Hospital during the past 25 years. This method of radiation treatment is based primarily upon that originally founded by the Curie Institute in Paris in 1921. It was first carried out by the Radiation Therapy Department of Bellevue Hospital in 1942.

For a proper foundation of a radiation therapeutic procedure is the need for the proper grouping of cases. Nowadays, most clinics use as their criteria the classification of cancer of the cervix outlined by the League of Nations in 1938. We, at Bellevue, have adhered closely to this staging.

The Bellevue Method of procedure is primarily along a clinical path encompassing examination and treatment. The examination is thorough and comprises general and special procedures.

General Examination: includes a careful history as to age, marital state, menstrual habits, pregnancy, injury, and onset of symptoms; and entails inquiry regarding general conditions such as: presence or absence of anemia; pulmonary or cardiac conditions; intercurrent disease; the presence of or history of syphilis; the presence or absence of kidney abnormalities either physical or functional; and bowel habits.

Special Examination: A careful examination of the abdomen and the genital organs is made to note the presence or absence of local or pelvic infection, and the condition of the rectum, urethra, bladder and kidneys. I. V. pyelogram study of the kidneys and ureters is carried out to determine any existing abnormality. Determination of the stage of the lesion, and extent of the invasion of the neoplasm is determined as far as possible by manual inspection and palpation.

During the past two years a smear test has been done in most cases, but actual biopsy is performed in all cases. It has been our custon to use the Schiller iodine test in cases not readily recognizable to the naked eye as malignant, to ascertain the best site for biopsy. In our experience we have never noted harm from a biopsy of the cervix, and seldom is bleeding following biopsy severe, and such that does occur is readily controlled by appropriate packing.

For clinical purposes all cervix lesions were divided into three recognizable types:

(1) The ulcerated excavated type, usually accompanied by infection and necrosis involving one or both lips of the cervix, with character stic indurated edges. (2) The proliferative type, characterized by a large bulging, cauliflower like growth, irregular protruding bleeding mass, usually involving the whole cervix and occasionally encroaching upon the vaginal walls. This type is often made up of the sensitive kind of malignant cells and frequently the growth is limited to the cervix offering a better prognosis than some of the other type lesions. (3) The infiltrating type which is the hard, nodular, infiltrating growth, that often does not ulcerate but slowly invades the underlying tissues and frequently the fornices by retromucosal infiltration.

*Read before the New York Roentgen Ray Meeting, February 21, 1949.

Pathology: Pathologically, most of the cases were in the squamous cell cancer group. Forty-four and five-tenths per cent were squamous cell epitheliomas, 41.4 per cent were plexiform epitheliomas, 2.5 per cent adenocarcinomas, and there were five cases of basal cell epitheliomas. A very small number were not defined.

Treatment: As a rule the type and intensity of the therapeutic procedures depend upon the extent of the involvement and not on the histologic type present.

Based upon study of all preliminary data and physical examination a treatment plan for the particular case is prepared and carried out. There is no set plan encompassing all cases. The chosen plan covers determination as to the method of therapy, whether surgery or irradiation, and whether radical or palliative measures are to be employed. In our opinion, radical surgery is limited to Stage I cases in patients peculiarly suited for such surgery. We are, however, equally enthusiastic about the cure of Stage 1 with properly employed irradiation.

The Bellevue Radiation Therapy Method utilizes a combination of X-ray and radium. However, before irradiation is instituted, all abnormal conditions that have been noted on examination of the patient are first taken care of. Infections, by appropriate hygiene and antibiotic measures, renal and bowel disturbance in the required manner and general weakness, malnutrition and anemias by supportive measures.

Frequently blockage of the bowel may be due to large pelvic malignant invasive masses. Recognition of this complication and appropriate measures taken for relief often helps avoid later unpleasantness. It has been the custom in the Radiation Therapy department to subject all cervix cases to a thorough roentgenographic examination of the urinary tract before irradiation. In this way one may be forewarned if a kidney involvement is present or the ureter is blocked, and appropriate measures be instituted towards relief before irradiation is administered, and at the same time precludes blaming untoward sequelae upon the radiation therapy applied to the individual case. Such precautionary reasons have often enabled patients to be successfully cared for even in critical instances.

Irradiation is planned for and outlined according to the extent, type and character of the lesion.

The local examination determines the extent and character of the lesion, whether or not there is appreciable invasion into the vagina, rectum and bladder, and whether pre-irradiation fistulae already exist. The question of pelvic involvement and its extent is determined at this time, if possible.

In the Bellevue irradiation method, treatment is begun with X-ray therapy to the pelvis except in those occasional instances where vaginal bleeding is acute and profuse. Based upon our long experience we definitely advise that X-ray therapy precede the local application of radium. In our opinion, X-ray therapy is extremely effective in controlling pelvic involvement, reduces secondary infection, often appreciably reduces the extent of the local lesion, controls bleeding and permits partial recuperation of the patient so that she can better tolerate radium therapy. The X-ray also attacks the cancer along the pelvic wall, the pelvic lymph nodes and the uterus.

X-ray therapy is administered through the pelvis through multiple or single fields.

Multiple Field Plan: The X-rays are directed toward the parametria through four pelvic portals, two anterior and two posterior. Treatment is given daily through two ports, alternately anterior and posterior. The dose is 200–300 r (measured in air) to each port per treatment until 2000–2400 r is administered to each area. The factors used are: 200 kv., with 0.5 mm. – 1 mm. Cu plus 1 mm. Al filter at 50 cm. distance, using 9x12, 10x15 or 20x20 cm. portals. In some cases of stout women, two additional lateral fields may be employed.

Single Field Plan: In the single field plan, the X-ray therapy is administered through one large anterior and posterior pelvic field. The factors used are 200 kv. with 0.5 mm. Cu plus 1 mm. Al filter at 50 cm. distance through 20x20 cm. fields. Two-three hundred r is given one field per day alternately at daily intervals until 2000–3000 r is administered to each field. This method is applicable only in the unusually thin patient.

Protracted Method: In some cases, the X-ray therapy was administered by the protracted method, i. e., applying X-rays through 4–12 fields over the pelvis with the special factors of heavy filtration, long target distance, and over a period of many days (from 20 to 30). The factors used are: 200–400 kv., 2 mm. Cu filter, at 60 cm. distance, through 10x15 cm. portals, at a 4–6 r per minute flux. Treatment is given every day to two portals per day, until a total of 2000–3000 r has been given to each area. This method is useful in the advanced case.

Radium Pack: In a few cases treatment was administered with the radium pack. The Bellevue Hospital 5 gram radium pack administers the rays at 6 cm. distance and is filtered through 2 mm. platinum. The dose is 5000–10,000 mgm. hours per treatment daily, alternately to each of two anterior and two posterior pelvic fields until 30–50,000 mgm. hours are administered.

In the course of 25 years we have noted no serious complications following this method of X-ray therapy. There was but one possible intestinal injury case, and only one case of bone fracture, which however was noted only after the patient had fallen out of bed. An occasional case developed mild proctitis or and cystitis. In the presence of pelvic infections chemo-therapy was instituted during the course of the X-ray treatment. As soon as the X-ray therapy is completed, the patient is re-examined, the condition re-evaluated, and a plan for the radium treatment is outlined.

Radium Therapy: In the usual case, radium therapy is carried out by the insertion of a radium sound into the uterus and the vaginal application of radium locally to the cervix. Either radium or radon may be used for this form of therapy.

The method of application depends on: the clinical type of the cervix lesions, the amount of cervix involvement, the degree of extension to surrounding parts, and whether or not a previous hysterectomy has been carried out. The type of hysterectomy must also be known.

The radium therapy method is based on that originally initiated by the Curie Institute in Paris in 1921 and subsequently modified by us. Both the uterus and cervix are treated simultaneously.

Radium Applicators Employed: For the uterus, the radium applicator used is a rubber sound of 3 mm. wall thickness made of pure, metal-free, gum rubber in which are placed the radium tubes. Depending on the length of the uterine canal, one or more radium tubes are used in order that the whole canal be irradiated. The amount of extension of the malignancy into the uterine canal from the cervix lesion determines the dose required from the uterine canal and the number and size of the radium tubes used is determined by this requirement. The radium tubes are usually of 5–15 mgm. each filtered by 1–1.5 mm. Pt.

Cervix Applicator: The form of the radium applicator for direct treatment of the cervix employed in the Bellevue technic is in most instances the "colpostat" as originally suggested by the workers of the Curie Institute, Paris, modified and designed by us as in its present form. It is a rubber device consisting of three metal free gum rubber hollow center corks, two of which are joined together by a rubber-covered flat steel spring. The radium tubes whose contents vary from 10–25 mgm. filtered through 1–1.5 mm. of platinum are encased in extra platinum or gold shields to give a total filtration of 2–2.5 mm. Two or more corks may be used, the number depending on the extent of the lesion under treatment, and the width of the vagina. The heavy filtration of the radium tubes, and the distance obtained by correct placement and proper packing, reduces the possibility of radium necrosis of the tissues nearest the applicators and permits intensive irradiation of the underlying tissues with gamma rays.

The Bellevue technic, however, is not a rigidly fixed one for all cases. The type of applicator to be employed in a particular case is determined by the condition presented in each case. The exigencies of the case determines whether a 3 cork or 2 cork colpostat is to be used, or whether or not a special device for the cervix lesion is necessary to properly treat the presenting conditions. In most cases treated at Bellevue it was found possible to employ the 3 cork colpostat, and that form of applicator produced in the main satisfactory results.

Technique of Treatment: (1) Anesthesia; (2) Preparation; (3) Dilatation; (4) Insertion of radium in uterus; (5) Insertion of radium in vagina; (6) Packing; (7) Post-radium care.

Experience has proven the advisability of carrying out this method of radiation therapy under strict surgical procedures in a properly equipped operating room, where emergencies, or unexpected difficulties, if encountered can be more readily and effectively cared for.

Anesthesia: General anesthesia has proven the best procedure in most cases, unless specially contra-indicated. Intravenous anesthesia has been satisfactory in some cases. The type of anesthesia depends on the condition of the patient and the character of the radium therapy employed.

Preparation: The patient is placed in lithotomy position on the operating table, the external parts and vagina properly cleansed in the accustomed manner for gynecologic procedures. The vagina is then dilated with a weighted speculum. Where this type speculum cannot be used, a bivalve speculum with flat blades is employed. The cervix is exposed and grasped with a tenaculum and pulled slightly forward. The cervical canal is then cleansed and disinfected with iodine.

Dilatation: The uterine canal is then slowly dilated with little trauma as possible to its full length with long, graded dilators beginning with No. 14 and continuing to No. 30 French. Forcible dilatation is not used because of the possibility of disseminating malignant tissue cells. Where dilatation is difficult the internal cervical os may be slightly incised with the scalpel so that dilatation may more easily be accomplished.

Curettage: Following dilatation a blunt curette is inserted and the uterine canal explored; sometimes a polyp or sub-mucous fibroid may thus be removed. A sharp curette is then inserted into the uterine canal and an endometrial specimen is examined to determine whether or not the cervix malignancy has extended into the body of the uterus. The canal is then disinfected two or three times with an iodine moistened tape.

Placing the Radium: Following dilatation the specially prepared radium sound covered with sterile lubricant impregnated with sulfanilamid powder and the open end tied by a strong linen or silk thread, is inserted with the blunt end first into the dilated uterine canal. In some instances perforation follows insertion of the radium sound. As this is sterile when put into the uterus, seldom does harm follow the accident and the radium may be left in place and the patient treated expectantly. Healing is usually uncomplicated upon removal of the radium.

In some cases a stay suture may be required to hold the radium sound in place. The cervix is then released and pushed back into the vaginal vault, the weighted speculum removed, and a flattened blade bivalve speculum inserted into the vagina. The prepared vaginal applicator, the colpostat, is then inserted into the vagina, the lateral corks being placed on either side in the right and left fornix against the cervix. The central cork, or corks, are placed against the cervix proper. The corks are placed perpendicular to the uterine canal in the anterior-posterior direction, so that their main effect is toward the cervix and pelvis and not toward the rectum and bladder. The corks are held in place by several pieces of 2-inch iodoform gauze packing.

Packing: Packing is important and proper packing prevents excessive irradiation of the vaginal walls and thus minimizes the possibility of fistulae formation. The colpostat and corks are held in

place by two-inch iodoform gauze, carefully and firmly packed into the vagina in such manner as to push the vesicovaginal wall and the recto-vaginal wall away from the radium applicators as much as possible. When packing is properly done the radium applicators remain in place throughout the course of treatment.

Occasionally, senile atresia of the vagina prevents sufficient exposure of the cervix and insertion of the colpostat. This condition may appear as circular, constricting fibrous bands. A bilateral slit through the constricting tissues enlarges the vagina and allows for proper placement of the colpostat. In some cases a limited episiotomy must be performed in order to properly place the colpostat. If tears occur, especially along the posterior wall, immediate repair should be carried out before the radium is inserted in the vagina. Before the patient is removed from the operating table it is well to note whether there is any bleeding through the packing.

The external urethral meatus is exposed so that catheterization if required can easily be carried out, a tight vulva pad applied and the patient returned to her bed and placed in a moderate Fowler's position.

Dosage: The radium is left in place long enough to give the required predetermined total dosage which varies from 5000–8000 mgm. hours, depending upon the extent and type of lesion treated. The amount of radiation applied in the vagina varies from 2000–4500 mgm. hours, and the safe limit for radium in the vagina is not over 4500 mgm. hours. A dose up to 9000 mgm. hours in the uterus has in our hands when properly applied proven safe.

Naturally since lesions and conditions vary in different patients there is no set rigid form of radium application applicable to all cases. Modification of the usual outlined technic is made as the exigencies of each case require. The three cork colpostat is useable in most cases, but in some but two corks may be used, and in some as a rule in Stage I cases a total dose of 5000 mgm. hours to both cervix and uterus may be sufficient to heal the lesion. In Stage II and III cases a dose of 8000 mgm hrs. may be required to control the condition. In stage IV lesions only palliative therapy is attempted with the aim of controlling bleeding and possibly healing the local superficial cervix ulceration. The radium dose in this type case is about 5000 mgm hrs. (The radium dose is calculated by multiplying the amount of radium used by the hours of application.)

Radium or Radon: In places where radium is not available and radon (radium emanation) may be readily acquired from a nearby source this form of energy may be employed in a similar manner to the radium element. The biological effect of radium and radon is similar, either may replace the other. It must be borne in mind that there is a constant rapid disintegration of radon, which must be taken into careful consideration in calculating dosages when radon is used. For the mathematical calculation of dosage of radon, a special chart showing the hourly decay of any radon applicator has been prepared, by the supplier of radon, by which the proper dosage may be readily calculated. The type of tubes, filters, sounds and colpostats used with radium may be readily employed in a similar fashion with radon.

The radium dosages decided upon for the particular case being treated may readily be translated into similar dosages with radon being used. The dose with radon is calculated in millicurie hours. In calculating the radon dose each millicurie destroyed produces approximately 133 millicurie hours of administered dose.

Where radon is used, note must be taken of the disintegration of the radon (radium emanation), and the applicator must be left in place for a longer period of time, or the initial amount must be greater than that used when radium element is employed.

For example, in Stage I cases with radium being used, the uterus is treated with a sound containing three tubes of radium, two each of 10 mgms and one of 5 mgm, a total of 25 mgm. The vagina is treated with a 3 cork colpostat, each cork containing 10 mgm a total of 30 mgm. The radium is left in place for 92 hours giving a dose of (55x92) 5060 mgm hrs., 2300 mgm hrs. to the uterus and 2760 mgm hrs. to the cervix.

When radon or radium emanation is used, the same formula may be employed but cognizance is taken of the disintegration of the radon. If a dose of 5000 mchrs is to be given then 38 mc. must be used up (5000 ÷ 133). If 55 mcs are used to begin with, to use up 38 mc will require six and one-half days.

Stage II and III cases require large doses up to 8000 mghrs. In the uterus a sound of three tubes is used containing 10 mgm radium each a total of 30 mgm. For the vaginal application a three cork colpostat is used containing three tubes of 15 mgms each, a total of 45 mgm. The radium is applied for 107 hours producing 8025 mgm hrs., 3210 mgmhr. in the uterus and 4815 mgmhrs. in the vagina. Radon may be used in a similar manner noting the disintegration factor of radon in determining the time of application required.

Bulky Cervix Tumor: In cases where the cervix lesion is of the large, fungating or cauliflower-like type, the mass is first removed, preferably with the endothermic knife, before radium is applied. As the cervical uterine canal is shortened by this procedure a shorter uterine sound will have to be used in irradiating the uterine canal. Following amputation of the cervix a small amount of iodoform gauze is placed against the cut surface of the cervix stump, to prevent hemorrhage which may occasionally follow cervical amputation. The radium colpostat applicators are then placed in the usual fashion, and pressed firmly against the stump, and held in position by iodoform gauze vaginal packing properly placed. The amount of radium used and the dose given are in accordance with the methods previously described.

Cervical Stump Malignancy: In cases where cancer occurs in the cervical stump following a previous supracervical hysterectomy, treatment is carried out by a combination of X-ray and radium therapy.

The X-ray therapy is administered in the usual manner with high voltage X-rays delivered through two anterior right and left and two right and left posterior pelvic fields with the following factors: 200 kv., with 0.5–1 mm. Cu plus 1 mm. Al filter at 50 cm. distance through 8x10–10x15 cm. portals. The dose given is 200 r to two portals alternately anterior and posterior at daily intervals until 1800–2000 r is administered to each portal. As soon as the X-ray therapy is conpleted radium therapy is administered to the stump, depending upon the length of the canal in the cervical stump, a one or two tubes sound is inserted and held in place if necessary by a suture through the lips of the cervix. If one tube is used the dose is usually 1000 mgmhrs., if two tubes the dose is 2000 mgmhrs. Against the cervix a 2–3 cork colpostat is placed in the vagina in the usual manner for a dose of 3000–4500 mgm hrs.

Unusual Forms: In those cases where the uterine canal cannot be located at the time of operation, radium is placed in the vagina for several days until the local mass has receded and the canal visualized and then the uterine sound is inserted and kept in place until the required dose is given.

In some cases where the malignant mass is very bulky and obstructs the vagina and cervical canal as much of the mass as possible is surgically removed and then the radium is applied. If following excision of the obstructing mass the canal is visualized the radium sound is inserted at once, if not the vaginal radium applicator is placed against the remaining mass and when this has receded in a few days and the cervical canal visualized the prepared radium sound may then be inserted into the uterus to give the planned for treatment.

In advanced cases, where radium is used to control bleeding of the local lesion it is applied only in the form of a vaginal applicator.

In cases where vaginal wall invasion has taken place it may be treated by locally placed radium in the form of interstitial radium by the insertion of radon seeds or radium needles into the involved areas of the vagina. At the same time the usual radium application is made to the uterus and cervix for control of the primary lesion or later after the treatment of the cervix has first been completed. In some cases treatment of the vaginal lesion may be carried out with a mold containing radium tubes fitted to the vagina; the radium is placed opposite the lesion. The dose given depends upon the size and extent of the lesion present.

Care Following Radium Insertion: Diet. Until the radium is removed the patient is limited strictly to a fluid diet. This relieves her of any bowel discomfort, or abdominal distress. A rectal tube is useful to relieve gas when necessary. A small amount of bicarbonate of soda is helpful.

Intravenous administration of 500—2500 c.c. of five per cent glucose, in saline solution, is given if there was much bleeding at the time of operation, if the patient appears dehydrated, if there is persistent postoperative vomiting and if the weather is very hot. Where much blood has been lost, transfusion is given. The patient is catheterized every 6–8 hours if she is unable to void. The retention catheter is rarely used in our cases, the patients being catheterized when necessary, at stated intervals.

Strong sedatives are seldom necessary, for in most instances, little pain is associated with the radium in place, a single dose of morphine gr. one-sixth is given. As soon as the patient reacts from the anesthesia and then codeine is used where necessary. An ice pack is placed over the suprapubic area, for several hours. To prevent intestinal over-irradiation the patient is moved from side frequently while the radium is in place. The radium is removed and appropriate chemotherapy given if there is a sudden rise in temperature above 102°.

When the required time has expired for the prescribed dose, the radium is removed. First the packing, then the colpostat and cork is removed from the vagina. If this is slowly and carefully done little discomfort is experienced by the patient and no bleeding ensues. The uterine sound is left in place until the vagina is douched, through a speculum, with a mild cleansing solution. Following the douche and drying of the vagina, the uterine sound is removed carefully. If bleeding follows and is profuse the vagina is packed with iodoform gauze. If no bleeding occurs no packing is used.

An enema is given and the patient kept in bed for another 12 hours, when she is allowed up and about and if no bleeding occurs may be discharged home.

Daily cleansing douching is advised after radium therapy.

Later Care: The patient is seen and examined at periodic intervals after treatment to note whether the condition has been controlled and whether or not recurrence has occurred.

Post radium stenosis of the cervical canal following radium therapy may cause a hematometra or pyometra which requires dilatation for relief.

In most cases following the radium treatment there is no further therapy necessary. The patient is observed at periodic intervals, and local reaction is cared for by hygiene measures. Should malignancy persist or recurrence be noted, appropriate local treatment is administered. For persistent pelvic involvement a further course of X-ray therapy is carried out.

Conclusion: Twenty-five years of clinical experience permits us to offer this method of treatment for cancer of the cervix as a most efficient and applicable method of radiation.

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ETIOLOGY AND SPECIFIC TREATMENT OF INTRAVASCULAR THROMBOSIS AND EMBOLISM

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In spite of admirable efforts of clinical medicine the problem of intravascular thrombosis and embolism has not been solved yet. Alone *The Journal A. M. A.* has published nine papers and three editorials on this subject from June 9, 1945 to May 24, 1947—a remarkable fact proving the great importance and interest this serious postoperative complication has gained among clinical investigators. Arthur V. Allen et al. (1+2), Loewe et al. (3+4), Bauer (5) Lesser (6), Ochsner (7) Aycock and Hendrich (8), and Edgar V. Allen (9) have presented their different views on phlebothrombosis and suggested either ligation or anticoagulent therapy with heparin or Dicumarol. Some of the authors have even advised to use both treatments simultaneously. In his paper (9), Edgar V. Allen states "Sometime in the future there may be no valid reason why the coagulability of the blood in man may not be maintained indefinitely and safely at a level which will not permit intravascular thrombosis." To accomplish this task will demand an explanation for the true cause of this complication and the offer of a simple and specific treatment representing according to Edgar V. Allen (9) "the ideal anticoagulant for clinical use."

To objectively approach the problem of postoperative thrombosis requires to base deliberations on the following two facts:

1. According to all statistics this complication has considerably increased since World War I.

2. Postoperative thrombosis is very rarely encountered in patients under 20 years of age—Arthur V. Allen (1) had among 367 cases only seven belonging to that group.

Furthermore, according to Storz (10) who introduced the concept of the "thrombotic," patients of this vegetative type when examined reveal asthenic habitus, hypotension, constipation and lymphocytosis.

These facts make the conclusion inevitable that for the development of intravascular thrombosis those organs of the human body must be taken into consideration which are also more often found to be diseased since the end of World War I but usually are in normal condition in young patients. Besides, these impaired organs must offer a satisfactory explanation for the presence of hypotension, constipation and abnormal differential count.

As reported in a previous paper (11), observations over many years have conclusively shown that liver diseases have much more increased since World War I than is usually recognized, and they are mostly diagnosed in patients beyond the age of 20 years. This knowledge covering the above mentioned two facts plainly pointed to the liver as the responsible organ for the development of distant thrombosis. But one condition was still to be complied with: the dysfunction of the liver must explain hypotension, constipation and abnormal number of lymphocytes.

Until recently, it was not possible to diagnose beginning liver with certainty. On the other hand, the ideal solution of the problem of postoperative thrombosis demands not only to quickly relieve this condition but to predict its eventual development and to prevent it.

From now on, it should be possible to comply with all these requirements.

In a reported case (12) with two acute attacks of agranulocytosis the fundamental observation was made that relative lymphocytosis decreased with improvement of the liver condition. Further investigation of this phenomenon resulted in the conclusion that lymphocytes are directed by the hepatoendothelial system (HNS) the chief organ of which is the liver. If the differential count offers a normal amount of lymphocytes (22–26 per cent) the HNS is supposed to function normally. In case of lymphocytosis or lymphopenia, however, the HNS and with it the endothelial part of the liver is diseased.

With the introduction of the Blood Protein Test-BPT.—(13) it is possible to reliably determine liver function. This test is based on the rapid shift of the A/G ratio and serum globulin. If their values do not change, liver function is normal and as experience has shown lymphocytes then are within normal range.

Applied to the problem of postoperative thrombosis these facts mean that normal differential count and normal BPT. guarantee nonappearance of this complication. However, a patient with slight change in lymphocytes and serum globulin must already be considered a risk and if the differential count offers lymphopenia and the BPT. an increase in globulin after one and/or two hours then the danger is obvious.

As already previously stated (11), the quality of the blood depends on the normal function of the organs of the upper abdomen. If they are diseased the blood count will show definite changes, and it is to be assumed that the substances performing blood clotting will also be impaired. Its mechanism is not known in all details but it seems to work

in this way: When thrombokinase is combined with calcium salts prothrombin is activated and presumably converted into thrombin; united with fibrinogen it changes this substance to fibrin which together with blood cells forms a clot.

According to these explanations intravascular thrombosis will—generally seen—develop as follows:

The foundation for this complication is an impaired liver, and one fact is obvious: without a diseased liver there will be no postoperative thrombosis. As already explained (11), the liver belongs with its epithelial parenchyma to the hepatoepithelial system (HPS) and with its endothelial parenchyma to the hepatoepithelial system (HPS) and with its endothelial tissue to the hepatoendothelial system (HNS). The HNS also comprises the endothelium of spleen, bone marrow and usprarenal gland, and the HPS the ephthelial parts of stomach, pancreas and intestinal tract. Besides the liver it is especially the impaired function of the suprarenal gland that is of importance. This organ is anatomically composed of two different parts: medulla and cortex. Through its hormone the cortex plays an important role in metabolic processes and in physical or mental emergencies but it is the medulla that secretes adrenalin being concerned with directing carbohydrate metabolism and maintaining the tonus of the heart and blood vessels. It is well known that in an adrenalectomized animal glycogen disappears from the liver while the blood pressure is extremely reduced. Considering these facts it can be assumed that a diseased liver through its endothelial and epithelial parts will finally affect the whole HNS and HPS including the suprarenal gland resulting in diminished production of specific substances. Thus, an abnormal carbohydrate metabolism will follow, digestion will suffer and constipation ensue. The blood pressure will be lowered bringing hypotension about which being the rule in thrombotics will also slow down circulation in veins. At the same time, the differential count will show lymphocytosis in conformity with the impaired HNS and HPS, and the well balanced relationship among the substances needed for blood clotting will be harmed too.

In many cases there is another factor contributing to intravascular thrombosis: diseases of the blood vessels. Venous thrombosis will more easily develop if phlebitis exists which rather often seems to be caused by focal infection. It is Otto Meyer who in a recent paper (14) pointed out that "peripheral phlebitis is in most cases caused by focogenic infection." But no peripheral phlebitis will appear as long as the HNS is able to successfully fight focal infection, and only if it prevails for a longer time will the liver and with it the HNS be defeated thus leaving the whole human body open to invasion by toxins and eventually bacteria. Anemia, constipation and lymphocytosis will slowly develop) the importance of the relativity of the degree of disease can best be demonstrated in these cases. Finally, peripheral phlebitis will result and with it the possibility of intravascular thrombosis.

In surgical cases, postoperative shock and the agent used for inhaling anesthesia will favor development of distant thrombosis. Postoperative shock will depress circulation and respiration while inhalation of the anesthetic will take its damaging effect on the liver.

These explanations seem to comply with the requirements stipulated for the solution of the problem of intravascular thrombosis. The increase in diseases of the liver—often of very low relative degree—encountered since the end of World War I is an established fact. That this condition concerns mostly patients beyond the age of 20 years is also substantiated by experience. Furthermore, it seems proved that liver dysfunction through the HNS finds its expression as lymphocytosis or lymphopenia in the differential count. That the liver cell damage will bring about unbalanced production of specific substances of the liver —including those essential to blood clotting—and of the suprarenal gland causing hypotension results from the systemic relationship of these organs. Thus, proof seems to be submitted that the diseased liver is the central cause for the development of distant thrombosis and this knowledge is confirmed by the success of the specific treatment for this complication.

The complete solution of the problem of intravascular thrombosis requires prevention and rapid cure of phlebothrombosis if prophylactic measures cannot be applied in time. If the cause for this complication is said to be found in disease of the liver and its two related systems (HNS and HPS) then their improvement or full restoration should prevent the development of distant thrombosis or if need be, cure it.

In this connection, the blood proteins are of great importance. Not only that fibrinogen is one of the factors concerned with blood clotting but—as already mentioned above—it is serum globulin that is always increased in case of marked liver disease. If a treatment is supposed to exert specific influence on postoperative thrombosis, then this method must be able to shift serum globulin to the right, i. e., reduce its value.

It is possible to obtain these results with Pronor, the injectable compound consisting of extracts from organs of the upper abdomen. Pronor will shift serum globulin to the right if the liver is not too seriously diseased. This shift will take place within one or two hours after the injection as explained in the Blood Protein Test (13), and if given daily the level will remain lower as reported in the following cases:

Case. 1. R. M. Age, 34 years. Male. Diagnosis, Liver cirrhosis

		Serum globulin
Leukocytes: 6200	Before injection:	2.95 gr.—
Lymphocytes: 48%	Two hours later:	1.13 gr.%

Case 2. F. M. Age, 33 years. Male. Diagnosis, Liver cirrhosis

		Serum globulin
Leukocytes: 6000	Before injection:	2.31 gr.%
Lymphocytes: 55%	Ten days later:	1.72 gr.%

Case 3. L. A. Age, 41 years. Male. Diagnosis, Liver cirrhosis

Leukocytes: 5800	Before injection:	2.78 gr.%
Lymphocytes: 37%	12 days later:	2.10 gr.%

Case 4. A. R., Age, 57 years. Male. Diagnosis, Liver cirrhosis Lambliosis intestinal

		Serum globulin
Leukocytes: 5800	Before injection:	2.60 gr.%
Lymphocytes: 47%	Two hours later:	3.58 gr.%

These results show that the differential count offers relative lymphocytosis in each case, and the assertion that an abnormal amount of lymphocytes is found in dysfunction of the HNS and thus of the liver seems to be proved again. The last case is especially interesting because this patient was given injections of arsphenamine, and it is probable that the severe liver cell damage was partly caused by this specific treatment.

From the above reported findings the conclusion can be reached again that one ccm of Pronor is able to shift blood proteins within two hours, and this shift is upheld if Pronor is supplied daily. Therefore, Pronor seems to be exceptionally qualified for use in case of intravascular thrombosis. The rapidly accomplished effect is of great importance and for this reason it can be successfully used for prophylactic purposes.

Among the cases of phebothrombosis treated with Pronor are some of extraordinary nature. There was a female patient, age 73 years, suffering from decompensated myocarditis, her blood pressure being 230/125. She fractured the neck of her right femur, and her blood pressure was reduced to 170/95. The day after the accident, she came down with severe swelling of the left leg, and diagnosis of posttraumatic phlebothrombosis was made. Patient was given Pronor with the result that after three more days she was sitting up in bed and on the sixth day, the left leg appeared nearly normal. Patient recovered from her accident without further complication. On the day after the accident her blood count had 2,900,000 erythrocytes, 49 per cent hemoglobin and 8500 leukocytes with 11.2 lymphocytes. Fifteen days later, erythrocytes were 3,600,000, hemoglobin 60.5 per cent leukocytes 6200 with 30.4 lymphocytes.

Another case concerned a female patient hospitalized for decompensated valvular heart disease. After compensation was achieved patient was allowed to be out of bed and having been in a chair for one hour she was told to walk back to bed. While on her way, she suddenly developed hemiplegia of the left side of her body apparently caused by cerebral embolism. Patient was given Pronor at once with the result that the paralytic condition cleared competely up.

In order to avoid in the future the complication of intravascular thrombosis each patient should have a blood count and a Blood Protein Test before an operation. If both are normal it can be assumed that the patient will have an uneventful recovery. Should the tests show liver disease the patient will have to be treated with Pronor until they turn normal. In case of emergency, Pronor will have to be administered before and after the operation in order to prevent the development of intravascular thrombosis. The use of anticoagulants can be discontinued and the coagulability of blood in man can be maintained at a safe level if the condition of the diseased liver is improved by treatment with Pronor. Then, the quality of the blood depending on the liver and its related organs will be returned to its normal range and the complications of intravascular thrombosis and embolism will be prevented.

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EVOLUTION OF SOME PHYSIOLOGICAL CONCEPTS

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Physiology has come a long way from the days of Hippocrates and his four cardinal elements of nature—earth, air, fire and water which, colored by medical tradition, became the cardinal fluids or humors of the body. Blood, hot and moist, corresponded to air; the yellow bile or choler, hot and dry, corresponded to fire; the phlegm, supposedly secreted from the brain and drained through the nose, moist and cold, corresponded to water; and the melancholy black bile, dry and cold, to earth.

But Jean Fernel, a French physician born only five years after the discovery of the New World, first gave impetus to the newer physiology. His

book, the *Natural Part of Medicine*, appeared in 1543, the same year as Copernicus' *De Revolutionibus*. In the second edition this book became simply *Physiology*, the first use of that word as a book title. Therein Fernel challenged the whole humor concept and declared that the humors were not strictly parts of, but were merely contained in the body.

Instead he favored the contemporary doctrine of the "coctions," the first constituting the conversion of food into chyle, or complete digestion. The second or great coction comprised the manufacture of blood from chyle; the third involved the production of flesh from the materials supplied in the blood. Fernel appeared to hold that mind and body both had a natural nutritive instinct. But physiology then remained rather static for another century.

That brings us to Jean Baptist von Helmont, born in Brussels in 1577. He was a chemist of sorts; he also performed experiments with animals and examined their various organs at different times after feeding different materials. He finally concluded that there were not only three, but six coctions.

The first coction or cooking took place in the stomach where food and drink were turned into chyle by means of ferments—an original idea of von Helmont. This fermentation, he observed, took place in an acid medium. The chyle assumed a saline nature on passing into the duodenum. Here the second coction took place aided by the bile. The third process was transformation into blood, aided by two ferments derived from the liver.

The fourth coction took place in the heart; the dark blood of the great veins was here converted into the bright blood of the arteries—von Helmont completely overlooked the lungs. Harvey was his contemporary, but von Helmont either had not heard about the circulation of the blood, or ignored the information if it had come to his attention. The fifth coction of von Helmont was a mere continuation of the fourth, and the sixth took place in the "kitchens," or laboratories, of the body, or the tissues themselves, and was aided by a ferment peculiar to each tissue.

Here von Helmont was very close to a modern idea. For the tissues do derive their nutriment from the blood, making their own peculiar transformations with the aid of their own ferments or enzymes. Von Helmont viewed all the changes he described as chemical in nature, and what he was describing essentially was those processes we call metabolism. The next step was taken after Priestley, Scheele, and Lavoisier, independently and each in his own country, discovered oxygen.

It was Lavoisier who measured the rate of combustion in human subjects. When he was about to show that the laws of the conservation of energy were followed in the living body, he was executed because the new regime held that France had no use for scientists. Had Lavoisier completed his investigations he might have predated the work of von Mayer and Helmholtz by 60 years, in which case physiology rather than physics might have been the science to advance most rapidly to precision, exactitude, and reliable dependability.

Lavoisier showed that a guinea pig produced 226 grains of carbon dioxide in 10 hours. With La Place he invented the ice calorimeter. Using this instrument he proved that a guinea pig gave off heat enough to melt 13 ounces of ice in 24 hours. On a basis of the first experiment he had estimated that the quantity of carbon required to produce 226 grains of carbon dioxide would have caused 10.4 ounces of ice to melt. At that point, when trying to solve the discrepancy in his work, Lavoisier was arrested. Had he completed the investigation, he would have come upon the laws of the conservation of energy. Unfortunately nobody immediately followed up his work, probably because no one could.

The next investigator of moment was Justus von Liebig, who went to Paris, in 1823, to work with Gay-Lussac, an associate of Lavoisier. He first systematically examined the intake and output of animals, performing crude balance experiments. He discovered that the proteins of legumes and cereals were quite similar to the albumins of the animal world. He separated nitrogenous from nonnitrogenous organic foodstuffs. He showed that the same sort of substances occur in our foods as in the constituents of our bodies, and that the latter arise from the former. Next we come to Liebig's most notable pupil Carl von Voit.

Voit's first great discovery was that the food nitrogen of an adult could, under proper conditions, be accounted for by the nitrogen of the feces and urine, at least within 0.3 per cent. He also found that muscular work was not done at the expense of protein, as Liebig had supposed, and that carbohydrates spare proteins by reducing the amount of protein necessary for nitrogen equilibrium. He studied the respiration and protein metabolism of dogs and men, using specially designed apparatus. He established finally that, whereas the protein requirement depends on the nature and extent of our structural tissues, the fat and carbohydrate, or energy, requirement depends on the extent of our physical activity.

Friederich von Müller was trained by Voit and followed in his footsteps. Max Rubner and Graham Lusk were also pupils of Voit. Rubner proved that the heat actually produced by a dog may be accounted for by energy liberated from its oxidized foodstuffs. This, long after Lavoisier's death, established the physiological validity of the law of the conservation of energy. Rubner also discovered that the resting heat production is proportional rather to the surface area of a body than to the body weight. He also unearthed specific dynamic action, the characteristic increases in heat production over the basal rate produced by the separate ingestion of protein, fat, and carbohydrate.

Another pupil of Voit was the father of nutrition science in the United States and a pioneer nutrition

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The above material is a condensation of only some parts of a paper presented at the 30th Annual Meeting of the American Dietetic Association, October 17, 1947, by Dr. John R. Murlin of the University of Rochester, and former editor of the *Journal of Nutrition*.—T. S. H.

research worker of the Department of Agriculture, W. O. Atwater. From what he had learned in Germany, Atwater decided to construct a calorimeter for studying the energy metabolism of man; this he did with the aid of the physicist, Rosa. Using this instrument they confirmed that the law of the conservation of energy applied to human beings as well as to dogs. F. G. Benedict worked with Atwater and succeeded him in work with the calorimeter which, in 1906, was moved to the new Carnegie Laboratory in Boston.

Benedict worked on all sorts of animals from mice to elephants. He found great differences in total heat production and metabolism expressed per kilogram or per square meter of surface. He found that a horse, for instance, has a higher mode of metabolism expressed either way than a cow or a bull of the same weight. Sex differences attributable to the action of hormones were found in the bovine as well as in the human race.

Lusk's calorimeters were constructed at Cornell Medical School on the Rosa-Atwater-Benedict design, with improvements by H. B. Williams. They were operated on the healthy and the ill by E. F. DuBois of Bellevue. Lusk for many years studied the thermogenic effect of various foods. He showed that fat had a greater thermogenic effect than carbohydrate, and also that the effect differs with the stage of digestion. It rises most rapidly after carbohydrate feeding, next after protein, and most slowly after fat. Using a bed calorimeter, under DuBois' direction, much relevant information was obtained on energy exchanges during many kinds of disease. These results have helped many a doctor adjust the diet of sick people.

Then there was S. Brody of the University of Missouri who pointed out that the more food we consume the less efficiently we digest and utilize it. The higher the body weight, the more food is required for maintenance and the less can be left on deposit. The reverse of these propositions also holds.

Furthermore, a dog running on a treadmill has a greater energy expense due to this activity but he can utilize less energy foods for his muscular work when overnourished than if lean. Finally, the law of diminishing returns is well known to livestock growers who find that it requires more grain to put the last few pounds on a steer than was required to put any such similar additional weight on its carcass.

A great advance in the study of nutrition was made when Karl Thomas, in 1909, introduced the method of determining the biological value of proteins. H. H. Mitchell made good use of this method. The wastage of protein from the body is determined as nitrogen when the diet contains the least possible quantity of protein, though supplying sufficient of other dietary essentials. This nitrogen excretion is called endogenous, because practically all of it comes from the bodily tissues.

Thereafter the proteins to be tested are fed with the same basal diet as before and at a level estimated to produce nitrogen balance, or a bit below that. Then the difference in fecal nitrogen when the protein is fed and when only traces are fed is deducted from the nitrogen of the protein. This gives the quantity absorbed. The difference in the urinal nitrogen when protein is fed and when it is not fed gives the quantity retained. The percentage of the absorbed nitrogen which is retained rates its biological value.

Very recent work carried on under Dr. John R Murlin at the University of Rochester indicates that whole egg has the highest biological value with the following in order thereafter: egg albumin, casein, beef, peanut flour, and wheat gluten. Various other laboratories are also at work on this problem using human subjects.

Liquid Penicillin

Smith, Kline and French Laboratories, 1530 Spring Garden Street, Philadelphia, Pennsylvania, are introducing Eskacillin, a liquid penicillin for oral use.

Eskacillin maintains its potency for seven days when kept in a refrigerator. It may be prescribed wherever oral dosage of penicillin is indicated: the prophylaxis or treatment of mild secondary bacterial infections due to penicillin susceptible organisms. In severe infections, where parenteral penicillin is indicated, Eskacillin may be prescribed as a supplementary measure.

Each teaspoonful contains 50,000 units of crystalline penicillin G. Product is available on prescription only in two fluid ounce bottles, providing a total of 600,000 units of penicillin.

Preparation to Treat Hyperthyroidism

Antibason, the first methyl thiouracil preparation to be introduced in the United States is now available, according to Roche-Organon, Inc., of Nutley, New Jersey.

Antibason is indicated in the treatment of thyrotoxicosis, Graves' disease, exophthalmic goiter and toxic adenoma. It is of exceptional advantage for management of hyperthyroidism when surgery is contraindicated as in patients with heart disease, diabetes, or pregnancy, patients with extremely high basal metabolic rate, and those in whom hyperthyroidism recurs after subtotal thyroidectomy.

For the average case, a dosage of 200 mg. daily is sufficient to control the system. Antibason is available for physicians' prescriptions in 50-mg. tablets, bottles of 100 and 1000 tablets.

PERSONALS

Dr. James A. Doull, medical director of the U. S. Public Health Service, has been appointed medical director of the Leonard Wood Memorial, the American Leprosy Foundation.

Dr. Doull succeeds *Dr. H. Windsor Wade* who because of ill health has been relieved of administrative duties and appointed associate medical director. Dr. Wade will continue his pathological studies at Culion, Philippine Islands, and the editorship of the *International Journal of Leprosy.*

Headquarters of the medical department of the Memorial have been transferred from Culion to 1832 M Street, N. W., Washington, D. C.

Dr. William T. Salter, professor of pharmacology at Yale University, has received the first Iodine Educational Bureau Award for Research in the Pharmaceutical Chemistry of Iodine.

Dr. Salter was cited for his research on the relation of iodine in the blood to the thyroid gland. He was one of the first researchers to use radioactive iodine to discover the body uses of that chemical.

Since he joined the Yale staff in 1941, Dr. Salter has directed extensive research in standardizing new drugs. He has also been a consultant to the U. S. Pharmacoepia and the Food and Drug Administration.

Dr. Charles Buckman, assistant director of Creedmore State Hospital on Long Island since 1941, has been named to take over the directorship of Gowanda State Homeopathic Hospital in Helmuth, Erie County, New York. He has been a staff member at Creedmoor since 1934. The new director is a diplomat of the American Board of Psychiatry and a member of the American Psychiatric Association. He is also a member of the New York State and Queens County Medical Societies.

Dr. E. Gifford Upjohn, vice-president, The Upjohn Company, Kalamazoo, Michigan, was elected president of The National Vitamin Foundation, for 1949. Dr. Upjohn succeeds *Basil O'Connor*, attorney and president of the American Red Cross, who was named to the newly created position of honorary chairman of the board of governnors.

Dr. Gregory Stragnell has joined Organon, Inc., manufacturers of endocrines and pharmaceutical products, as executive vice-president and general manager at the new Organon plant in Orange, New Jersey.

Dr. Frederick MacCurdy, Commissioner of Mental Hygiene in New York State, has announced the appointment of new directors to three state hospitals. *Dr. Alfred M. Stanley* has been named senior director at Rockland, *Dr. Leo P. O'Donnell* is senior director at Harlem Valley, and *Dr. O. A. Kilpatrick* is director at Rochester.

Dr. Stanley will be transferred to Rockland from Harlem Valley State Hospital, where he has been senior director since 1944. He is a diplomat of the American Psychiatric Association.

Dr. O'Donnell's appointment marks a promotion from his present position as director of Newark State School which he has held since 1947. Previously he served as associate director at Pilgrim State Hospital.

From his present post as acting director at Rockland, Dr. Kilpatrick will take up duties as director of Rochester State Hospital. He has served as acting director of clinical psychiatry at Willard and Rockland and at Rockland was in charge of the service for convalescent patients and later of the children's unit.

Appointment of *Dr. James A. Shannon* of the Squibb Institute for Medical Research, New Brunswick, New Jersey, to the National Heart Institute as associate director in charge of research has been announced.

In addition to having direct charge of intramural research activities, Dr. Shannon will personally conduct research in certain aspects of heart disease.

To accept this appointment, it was necessary for Dr. Shannon to resign as director of the Squibb Institute for Medical Research, which Carleton H. Palmer, chairman of the Board of directors of E. R. Squibb and Sons, said Dr. Shannon has filled with distinction.

Appointment of *Dr. Ralph Gregg* as assistant chief of the Foreign Quarantine Division of the Public Health Service, Federal Security Agency, has been announced by Surgeon General Leonard A. Scheele.

Dr. Gregg, who has been Medical Consultant in the San Francisco office of the Public Health Service since 1946, will succeed *Dr. Frederick W. Kratz.* Dr. Kratz had been assigned to the Public Health Service office in Washington, D. C.

Dr. J. William Hinton has been appointed professor of surgery at the Post-Graduate Medical School, New York University-Bellevue Medical Center. In his new post, Dr. Hinton will be director, Fourth Surgical Division, Bellevue Hospital and continue as director of surgery at University Hospital, formerly Post-Graduate Hospital.

Under Dr. Hinton's direction, care of patients, teaching of doctors on a post-graduate level and various research projects will be carried out on the Fourth Surgical Division of Bellevue.

Nervousness, irritability, and the apprehensive, jittery manner characteristic of women during the menopause, is known, in many cases, to be due to estrogen deficiency. When such a condition exists, administration of DPS Formula 320 frequently brings about a markedly improved sense of well-being, reflected in both the appearance and the behavior of the patient. This balanced formula provides total natural estrogens in macrosuspension for intramuscular injection. Being a macrosuspension, DPS Formula 320 differs from estrogen solutions in that it exerts prolonged action and induces sustained therapeutic response, remarkably free from unfavorable side reactions . . . Although it is specifically designed for the relief of menopausal symptoms, DPS Formula 320 has also been found useful in the treatment of certain types of menorrhagia and metrorrhagia and, in conjunction with progesterone, in some cases of secondary amenorrhea.

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Vivisection Information

Uniting in a simultaneous effort throughout the United States, 99 national scientific and civic organizations will seek to speed medical research through a campaign announced by Dr. Anton J. Carlson, president of the National Society for Medical Research.

Dr. Carlson has explained that most national magazines, many advertisers, and several thousand clubs, associations and colleges are cooperating in this attempt to clarify the meaning of the word "vivisection" through a cooperative public educational effort.

Organizations cooperating in this attempt to clarify the role of experimentation in medical progress include: American Dental Association, American Diabetes Association, American Medical Association American National Red Cross, American Public Health Association, American Veterinary Medical Association, Association of American Medical Colleges, National Research Council, National Foundation for Infantile Paralysis, National Science Teachers Association, and United States Junior Chamber of Commerce.

Physician's Award

The recipient of an annual award given by the American College of Physicians to a distinguished physician for outstanding achievement in Preventive Medicine is Dr. Stanhope Bayne-Jones, president of the joint administration board of the New York Hospital-Cornell Medical Center.

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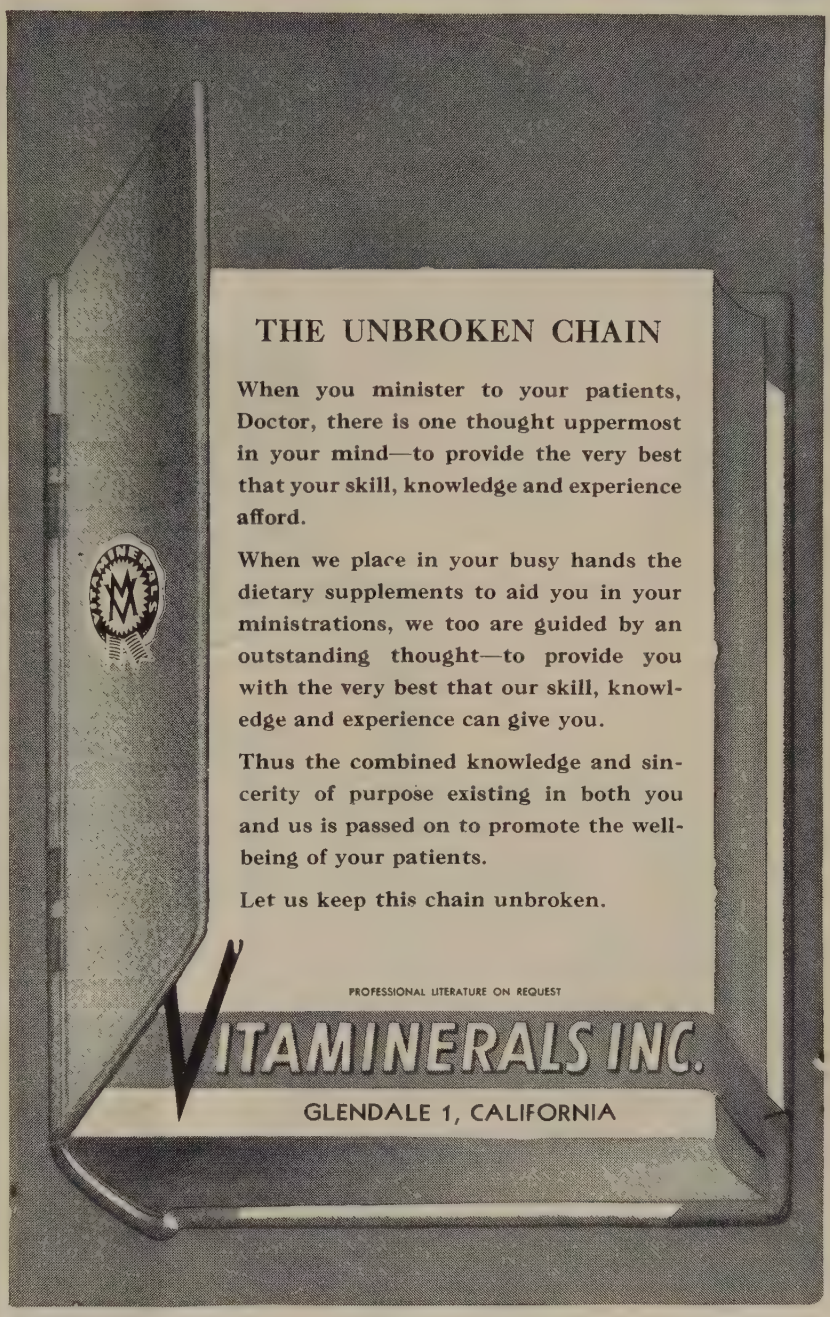
Dr. Jones received his award, the James D. Bruce Memorial Medal, from Dr. Walter W. Palmer, president of the College, at the annual convocation of the College. At the same time awards were given for outstanding work in research, for accomplishments in the practice of internal medicine and for distinguished service to the College combined with outstanding influence in the advancement of medical education, practice and research.

Drug for Alcoholism

A warning that untrue statements are being published about a newly discovered drug purporting to "cure alcoholism for a year with one dose" has been issued by Dr. Edwin G. Zabriskie, Professor Emeritus of Clinical Neurology at Columbia College of Physicians and Surgeons, and Consultant Neurologist of the Neurological Institute of Columbia Presbyterian Medical Center.

Dr. Zabriskie is chairman of the newly formed committee which is developing plans for investigation of tetraethyl thiuram disulfide, now being used in Denmark and Sweden for the treatment of alcoholics.

According to the committee, toxic properties and therapeutic value of the drug have not been fully explored and they feel improper use may be detrimental to development of treatment which would benefit hundreds of thousands of alcoholics.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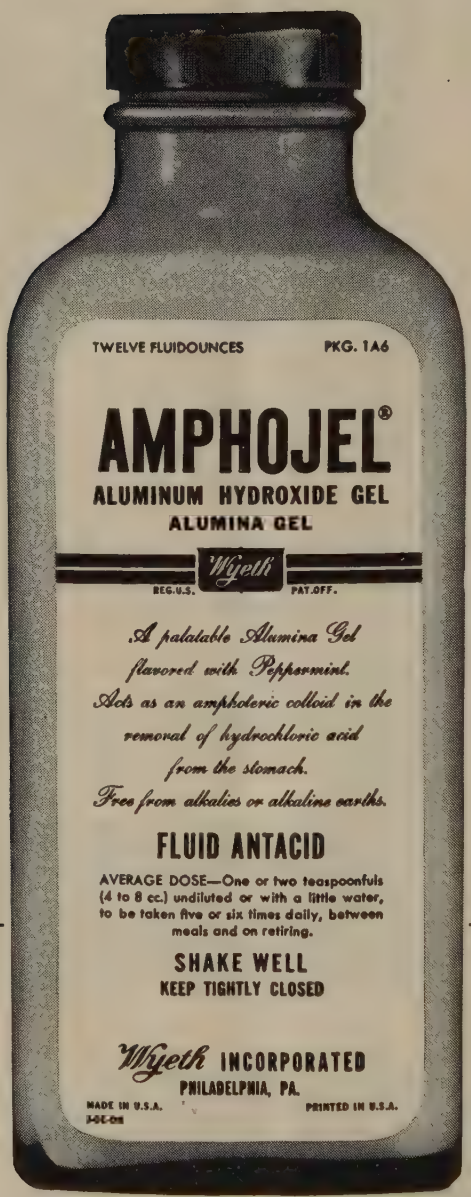
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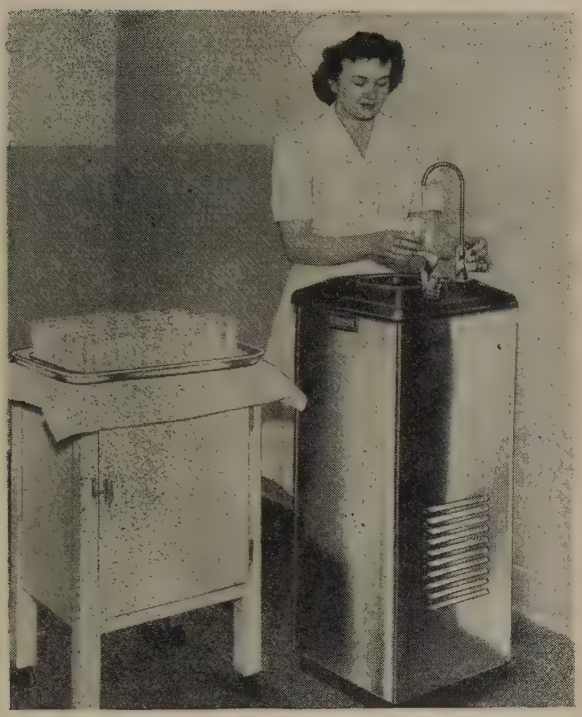
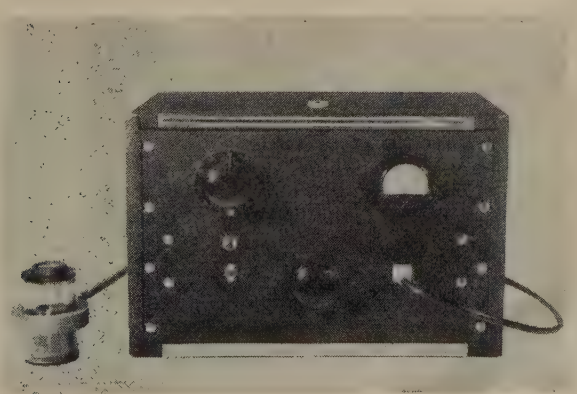


OVEN FOR LAB USE

National Appliance Company, Swan Island, Portaland 18, Oregon, has introduced new small, low-cost vacuum oven for use in small laboratories. Shelf space is four inches wide by seven inches long by five inches high.

Oven features "black-heat" heating elements with a life-time guarantee. Uniform temperature is assured by new design in placing an air cock on each side which provides a cross-flow of dried air removing moisture rapidly and completely.

Oven is manufactured in a gray wrinkle finish that sells for $97.50, and a stainless steel model for $126.50.

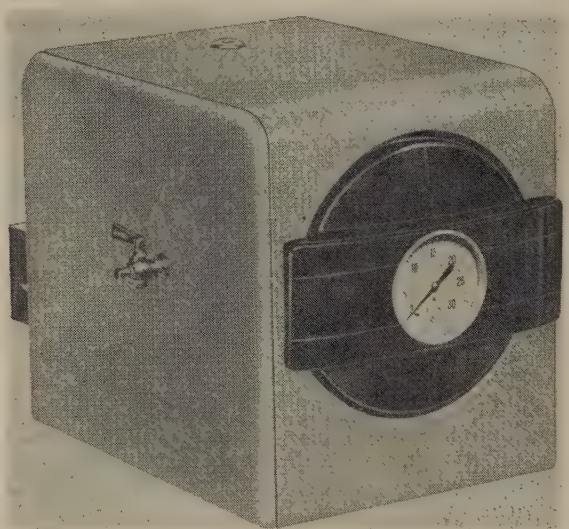


WATER COOLER MARKETED

Engineering department of the Uniflow Manufacturing Company, Erie, Pennsylvania, announces development of the Lectrik-Ice Water Cooler for use in hospital and professional offices.

This water cooler features immediate delivery of sixteen pints of water below 55 degrees F. with 80 degrees inlet water and 80 degrees room temperature; or 6¼ gallons each hour continuous bubbler operation cooling from 80 degrees to 50 degrees. A special storage tank with a capacity of 3½ gallons is mounted inside the water cooler.

Frame is of stainless steel with porcelain enameled top. Equipment includes one bubbler, one glass filler, a water inlet strainer and a pressure regulator.



GENERATOR ANNOUNCED

A new type "CL" (clinical-laboratory) ultrasonic generator has been announced by Ultrasonic Engineering Company, Maywood, Illinois.

Principal feature is the special convertible transducer for transmitting high-frequency vibrations to the skin of the patient. Transducer is connected to generating unit by a coaxial cable carrying low-voltage, high-frequency current. Standard frequency of the generator is 450 k. c. with alternate crystal and coil available for quick conversion to 900 k.c.

The New "CL" Ultrasonic Generator aims to provide the clinic, laboratory or physician with compact, flexible, inexpensive equipment for experimental research or treatment work.

PENICILLIN BI-PEN

New penicillian preparation, Bi-Pen, has been announced by C. S. C. Pharmaceuticals, a division of the Commercial Solvents Corporation, 55 East Washington Street, Chicago 2, Illinois. Officially designated as Crystalline Procaine Penicillin G and Buffered Crystalline Penicillin g Potassium for Aqueous Injection, Bi-Pen is a dual penicillin preparation with properties common to both insoluble repository penicillin salts and soluble crystalline penicillin salts.

Bi-Pen is supplied as dry powder which is stable in original vial for eighteen months at room temperature. It mixes promptly with sterile distilled water for injection, producing a uniformly dispersed suspension which is readily aspirated and injected. Injection painless and local nodulation or reaction rarely occurs.

SULTABS IS NEW NAME

C. S. C. Pharmaceuticals, division of Commercial Solvents Corporation, 55 East Washington Street, Chicago 2, Illinois, announces a new trade name for its Soluble Tablets Crystalline Penicillin G Potassium. This product is now designated as Soltabs.

Soltabs, formerly available only in 50,000 unit tablets, are now also available in 100,000 unit tablets. New potency is useful in pediatrics for oral administration of penicillin to infants, and in aerosol inhalation therapy when a dosage of 100,000 units is required.

Soltabs are compressed tablets of crystalline penicillin G potassium. They contain neither binder nor excipient and are readily soluble in water, milk, infant feeding formulas, and saliva.

BECOMVITE FOR DEFICIENCY

Sharp and Dohme, Inc., 640 North Broad Street, Philadelphia, Pennsylvania, announces national release of Becomvite Tablets, B-complex and ascorbic acid preparation for treatment of vitamin B and C deficiency states.

Becomvite Tablets are indicated in treatment of beriberi, pellagra, riboflavin deficiency, scurvy and selected submarginal B-complex avitaminoses. Product is also useful as supplement in therapy of typhoid fever and other infections in which there is a markedly elevated metabolic rate during period of high fever. It is also used to replace vitamin losses following surgery.

Becomvite is supplied in bottles of 30 and 500 tablets.

SMALL LYNORAL TABLETS

Organon, Inc., Orange, New Jersey, announces a new smaller-dose tablet of Lynoral, a derivative of the natural follicular hormone.

Tablets have been made available because clinical experience has indicated that minute doses of ethinyl estradiol usually suffice to control symptoms of the menopause.

Lynoral is also indicated in treatment of postatic cancer, hypogonadism and other disorders amenable to estrogen therapy. Lynoral tablets, 0.01 mg., are available in bottles of 100 and 1000.

ANTIBIOTIC PRODUCTS

Three new antibiotic products containing gramicidin, the active principle of tyrothricin, have been announced by Schering Corporation, Bloomfield, New Jersey.

Gramicidin is the pure antibiotic in stable form, free from tyrothricin's tissue irritating substance, tyrocidine. Gramicidin is very effective against gram-positive infections.

Gramozets are troches containing 0.25 mg. of gramicidin and 5 mg. of benzocaine in a palatable long-dissolving base. This troche is effective for relief of throat irritations and infections due to gram-positive bacteria.

Graminasin, an aqueous nasal solution containing 0.005 per cent gramicidin with dl-desoxyephedrine hydrochloride 0.125 per cent, is employed for relief of nasal congestion and prevention of secondary invaders of the common cold.

Gramoderm is effective for the therapy of certain skin infections, as impetigo, infected eczematoid dermatitis, ecthyma and infected superficial wounds and burns.

SALCEDROX TABLETS OUT

The S. E. Massengill Company, Bristol, Tennessee, has developed a new salicylate preparation called Tablets Salcedrox.

Salcedrox is designed to overcome the drawbacks attending salicylate therapy by increasing gastric salicylate tolerability by providing significant amounts of vitamin C and by reducing the toxicity of sodium salicylate.

The new product is recommended in rheumatic fever, rheumatoid arthritis and other conditions where large doses or prolonged administration of salicylates are required.

NEW PARENAMINE

A new formula and process of manufacture for Parenamine 6 per cent, the protein hydrolysate for parenteral injection, has been announced by Winthrop-Stearns, Inc., 170 Varick Street, New York 13, New York.

Parenamine is indicated in gastrointestinal disturbances, pregnancy and lactation, febrile states, rapid growth, hemorrhages, trauma, surgery, burns, cirrhosis and other pathologic liver conditions as a parenteral protein substitute or supplement for prevention or treatment of protein malnutrition.

HEPARIN PREPARATION

Organon Inc., of Orange, New Jersey, has announced a new, high-potency heparin preparation—Liquaemin (High Potency) Organon—containing 50 mg. of heparin sodium per cc. of solution. This preparation is suited for administration by intermittent injections—the method which is currently being recommended in many cases requiring anticoagulant therapy because of advantages over continuous intravenous drip.

Recent studies indicate that therapy with heparin materially reduces dangers of thromboembolic complications, especially those which occur during coronary thrombosis, acute myocardial infarction, phlebothrombosis, and thrombophlebitis. Liquaemin may also be used in frostbite, vascular surgery, blood transfusions.

By the intermittent injection method—intravenous, subcutaneous, or intramuscular injections—the dosage of Liquaemin ranges from 25 to 100 mg. given at intervals of three to twelve hours, depending on patient's response as determined by the clotting time. Coagulation time should be maintained at twenty to thirty minutes by the Lee-White method or about fifteen minutes by the capillary tube method.

Liquaemin is available in 10-cc. vials containing a total of 500 mg. of heparin sodium per vial.

STRONGER VITAMIN E

Winthrop-Stearns Inc., 170 Varick Street, New York, New York, is now offering Tofaxin, its brand of Tocopherol (Vitamin E) in capsules of higher potency to meet demands of physicians for high oral dosages.

Marketed as Tofaxin Stronger, it contains mixed tocopheryl acetates equivalent by biologic assay to 100 mg. dl-alpha tocopherol. Regular Winthrop-Stearns' Tofaxin capsules with the equivalent of 30 mg. dl-alpha tocopherol are being continued. Stronger capsules are available in packages of 100's and 500's.

DRUG FOR INTESTINAL INFECTIONS

National release of Cremothalidine, a suspension of Sulfathalidine, widely used drug for intestinal infections, has been announced by Sharp and Dohme, Inc., Philadelphia.

The new form contains the sulfonamide in a palatable suspension with a recommended dosage schedule for adults of one to two teaspoonfuls and for children of one-half to one teaspoonful four times daily. Cremothalidine, which is supplied in Spasaver bottles each containing eight fluid ounces, is indicated in the treatment of ulcerative colitis, urinary tract infections, and as an adjunct to surgery.

CREMODIAZINE RELEASED

National release of Cremodiazine-A, a sulfadiazine suspension that provides an alkaline urine and reduces incidence of renal crystalluria, is announced by Sharp & Dohme, Inc., 640 North Broad Street, Philadelphia, Pennsylvania.

Containing sulfadiazine in a fine state of subdivision, Cremodiazine-A also contains an alkalizing agent, sodium lactate, which insures maintenance of a neutral or slightly alkaline urine. This results in increased solubility of both free and acetylated form of sulfadiazine and thus, reduction in the incidence of crystalluria, renal damage and urinary tract obstruction.

Since renal complications were formerly serious problems in the use of sulfadiazine, the inclusion of sodium lactate in Cremodiazine-A increases the effectiveness of this drug.

Cremodiazine-A is indicated in pneumonia, meningitis, urinary tract infections.

Each 100 cc. contains 10 Gm. of sulfadiazine and 33.3 Gm. of sodium lactate with suitable flavoring agents added. It is supplied in Sharp & Dohme's Spasaver bottles containing 16 fluid ounces.

PRICE REDUCTION

A forty per cent reduction on Parenamine 6 per cent has been announced by Winthrop-Stearns, Inc., 170 Varick Street, New York, New York, According to Joseph G. Noh, company vice-president, the reduction has been made possible by increased production resulting from heavy demand for the new formula.

Administration of this product is made in prevention and treatment of protein malnutrition.

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BOOK REVIEWS

Anatomy

Anatomy of the Human Body: Research in the expanding science of anatomy. By HENRY GRAY, F.R.S., Late Fellow of the Royal College of Surgeons; Lecturer on Anatomy at St. George's Hospital Medical School, London. Lea and Febiger, Philadelphia, 1948. 1478 pages, 1263 Illustrations, mostly in color. Price $14.

There have been many editors of "Gray" since the first edition was given to the world by the famous anatomist and author, but none has been more successful in following in his steps than the present, Dr. Goss. As student indefatigable dissector, embryologist and teacher, he has brought to this new issue ripe scholarship, and the results of a lifetime in mortuary and laboratory. One might be tempted to say that "there can be nothing new in anatomy." Maybe so, but there is still some undiscovered country, or at least, some new methods of exploring the territory we thought we knew so well! Dr. Goss has rearranged the material in an effort to make it more orderly. As an embryologist, it is not surprising that the first chapter deals with the ovum and spermatozoon. Then follows a section on osteology, joints and ligaments. Next, muscles and fasciae, begins with development of the muscles, their description in regional sequence, and action and nerve supply for each instead of as a group. Concerning fasciae, much pabulum represents investigations of the author as well as of other investigators. The fifth section is devoted to the blood-vascular system, followed by arteries, veins, and the lymphatic system, which in previous works has not been given due emphasis. Neurology, and the special senses are appropriately dealt with, as is the "common integument." The respiratory and digestive tracts are described as "apparatus," but the urogenital, is still a "system." The ductless glands are given 12 pages, and the final chapter deals with surface and topographical anatomy. A fine "likeness" of Henry Gray adorns the frontispiece, and a page of text concerning his life is instructive and illuminating and should become a feature of every subsequent edition, of which there will, doubtless, be many. The publishers, as usual, have done a fine job of bookmaking.

Handbook of Treatment

Handbook of Treatment and Medical Formulary. By CHARLES M. GRUBER, M.D., Philadelphia, Pa.: F. A. Davis Co., 1948.

This alphabetical index of treatment is a composite of current methods of medical management. It is based on thorough evaluation of the recent literature crystallized in a manner difficult for the clinician to carry out independently. Besides the advances of the past decade have had such unparalleled significance and have emphasized so markedly rational therapy that the practitioner would be lost without such a terse summary. The book is concise, clear and authoritative. Although it reflects the most recent progress in therapeutic agents and procedures the author gives abundant space to the dramatic agents such as sulfonamides, antibiotics, antihistaminics, anticoagulants, antimalarials and B A L. One of the delightful features of the book is a series of prescriptions ready for transcription under each disease entity. Every aspect of current therapy is summarized under each disease entity with appropriate references to the current literature. The book is invaluable for the busy practitioner.

Human Nature

The Driving Forces of Human Nature and Their Adjustment: By DOM THOMAS VERNER MOORE, PH. D., M.D., Monk of the Order of St. Benedict. Published by Grune and Stratton, 1948.

Here is a most provocative book. It carries the reader through much early Americana of philosophy and psychology. It requires some knowledge of mathematics and physics. The author has travelled over much territory. He has command of a high order of documented background. Yet with it all, he has fashioned a good book. A little more detailed than required by the conventional physician in practice; certainly not a primer. The application of the basic information in the field of psychology is given by numerous case histories, and chapters devoted to discussion of neurosis of various organs and organ systems.

Dr. Moore has had unusual opportunities of observing members of the religious orders. He offers case reports on convent persons few in the field have been privileged to observe and publicize. No doubt, the approval for publication of this study infers the writer knows whereof he writes. In full, this text deserves detailed analysis by each reader. The wealth of information makes it a veritable storehouse of information not only on the main topic but all the underlying bases through the arts

and sciences. Faith, too, plays a part. Faith must begin somewhere. And Dr. Moore has brought us face to face with the need for it right now and here.

Contagious Diseases

Common Contagious Diseases. By PHILIP MOEN STIMSON, A.B., M.D., assistant professor of Clinical Pediatrics, Cornell University Medical College; visiting physician, Willard Parker Hospital; director, Poliomyelitis Service, The Knickerbocker Hospital; medical director, The Floating Hospital of St. John's Guild. Fourth edition, thoroughly revised. 67 illustrations and 8 plates, 6 in color. Philadelphia, Pa.: Lea & Febiger, 1947. Pp. 503. Price $4.00.

This authentic book on infectious diseases has been brought up to date deleting non-essentials and adding recent advances. New chapters have been included on sulfonamids and antibiotics; on management of contagion in hospitals, boarding schools, day schools and in the home; as well as a glossary of terms current in contagious disease practice. Bibliographies have been brought up to date with emphasis on articles of historical importance, and of scientific or clinical value. The content remains the same embracing those diseases prevalent in everyday practice.

The monograph presents the principles of contagion with emphasis on immunity and exanthema. Serum reactions are evaluated from the standpoint of mechanism and treatment. Each of the contagious diseases are discussed from the standpoint of etiology, pathology, epidemiology and symptomatology, differential diagnosis, quarantine, prevention and treatment. The book is interspersed with pertinent illustrations that are informative rather than decorative. The information presented has proved its worth in home, private and hospital practice and should be on hand to aid in the management of infectious diseases.

Psychological Tests

The Clinical Application of Psychological Tests. Diagnostic Summaries and Case Studies. By ROY SCHAFER, M.A., Staff Psychologist, The Austen Riggs Foundation. International Universities Press Inc. New York, 1948. 340 pages and Index. Price, $6.75.

This is one of the latest books on the practical aspects of clinical psychology which is now assuming so important a place in psychiatric practice. It illustrates a method of applying a battery of clinical psychological tests—the Wechsler-Bellevue Test, the Thematic Apperception Test, The Sorting Test of Concept Formation, a Word Association Test, and a test of Memory Efficiency. Each test is of the utmost importance in the delineation of personality features and psychopathology. Each is a standardized situation designed to give clear and instructive instances of the subject's style of thinking, which, in turn, throws light particularly on dominant trends of his ego-organization.

This book is of particular value to clinical psychologists, but pyschiatrists can also benefit greatly from it. Reliable diagnostic evaluations cannot be arrived at mechanically, but must be based on close acquaintance with the identifying personality characteristics of the varied illnesses encountered in clinical practice with the indication of these characteristics in test results. This book is also of value to those who are concerned diagnostic analysis in addition to those whose work is concerned mainly with diagnostic conclusions. While this book is of the greatest value to clinical psychologists, psychiatrists will find it as a means of offering an insight into the practice of clinical psychological testing and will therefore enable them to evaluate the work of the psychologist with greater efficiency.

Secretary's Handbook

Handbook for the Medical Secretary. Aspects of medical office routine. By MIRIAM BREDOW, Dean of Women, Eastern School for Physicians' Aids. New York, Toronto and London: McGraw-Hill Book Company, Inc., 1948. 389 pages including a glossary of medical terms. Price, $2.75.

Miss Bredow has rendered a distinct service both to the doctor and his office attendant in setting down the essentials of "what it takes" to be an efficient medical secretary. No matter how great the experience of a given individual, there is much more here than is found in the average office. Much that is not strictly "routine" concerns itself with the psychology of the situation—the relation of doctor-secretary-patient, plus the doctor's wife and family. The secretary should become the doctor's second brain, always ready and willing to give intimate and devoted service unobtrusively and confidentially. Many patients try to nudge the secretary to inform themselves concerning the doctor's private life, his play, his hobbies, his habits, his income, number of patients, and especially facts concerning their own particular ailments. They are not entitled to such information, and if they obtain it, they may sometime thrust it like a thorn into the flesh of their medical mentor. Moreover, the secretary should not tell too much of her own life, likes, dislikes, religion and family—one here mentioned seems to have tried to convert patients to Hinduism in which she became deeply absorbed! It ought not to be necessary to advise against that sort of "devotion to a cause."

Here is a daily guide full of good common sense as well as the more technical details of medical office work. Facing the question of giving a present

to a helpful assistant, a physician cannot do better than offer this helpful book.

Clinical Psychiatry

Modern Clinical Psychiatry: By Arthur P. Noyes, M.D. Published by W. B. Saunders Company, 1948.

This is the third edition of a book for the physician in general practice requiring a recent text on an ever growing subject. The lay press and the radio are forcing the profession in self defense to have the very latest ideas on this subject of the mind and mentality. The increasing number of non-medical people engaging in psychiatry indicates the need for the service to the patient.

Dr. Noyes offers a readable text and the reader does not have to belong to one or another or any school to appreciate the lessons given. The introductory chapters are excellent, clear cut, and really introduce the subject matter. Some old timers will find the definitions of great help and the short and few in number footnotes are not obvious. But the text will find its own place in practice by permitting the physician to make a quick library search with a definite patient in view. Take the well written and full chapters on syphilis. A fund of historical fact is offered throughout the chapters. Good clinical approach; excellent differentiation; and indications for therapy with advantages and disadvantages of each form. Penicillin formulas are given. What more can a doctor desire? Ah yes, since a reviewer must find something the author omitted—how about a sentence or so telling the doctor about the possibility of a syphilitic having some mental condition independent of syphilis as its cause?

Two sections of the text are especially appealing to the physician in practice—one is entitled Psychiatry and General Medicine, and the second Child Psychiatry. These are readable, and will invite re-reading. In these one finds a clue to the place of the specialized subject in the every day contact with patients.

And as an aside—the number of references in the index to psychosomatic is very low—and limited to the two chapters just mentioned!

An excellent bibliography is given at the close of each chapter.

Interns Manual

A. M. A. Interns Manual. Helpful information for Interns. Published by the W. B. Saunders Co., Philadelphia and London, 1948. 190 pages and an index. Price, $2.25.

This brochure was compiled and edited in the office of the Council on Pharmacy and Chemistry with the help of several authorities on various subjects. Many hospitals have a guide book for internes which is peculiar to the needs of that particular institution. This little book does not replace such, but supplements it with information of a general nature which may have been forgotten or overlooked in an emergency. The hospital expects much from the interne; and he has a right to obtain good food, lodging and training from the hospital. It should be a two-way street all the way—and it sometimes is! There are refresher notes on clinical and laboratory data, drug administration, materia medica which lists "useful drugs" only, and various other matters. The diagnosis and treatment of acute poisoning in Chapter V should be committed to memory, since there is no time for reading in such an emergency.

It would be pleasing to find a nugget of information on resuscitation in cardiac or respiratory failure during or after anesthesia, such as insertion of a direct tube into the larynx, aspiration of blood, etc., or removal of a foreign body, possibly regurgitated and inhaled. Shock is allotted to one page (P. 21), and is quickly followed by coma in diabetes, convulsions in infancy, gastric and pulmonary hemorrhage, and cerebral vascular accidents. Hemorrhages from the nose, tonsil bed and uterus are briefly dealt with, but what of the shock to a patient who has touched a live wire? In most of the former, one has time enough; in such a contingency as shock from electricity, death is imminent and often kills instantly. Nevertheless, some individuals recover under proper management. How to do it is told in more pretentious volumes, but it should be common knowledge as ready at hand as a hypodermic (which may when improperly used be a contributing cause of *exitus letalis*) . . . However, one can cheerfully recommend this excellent attempt to aid the inexperienced young doctor before he enters private practice.

Medical Hypnosis

Medical Hypnosis: By Lewis R. Wohlberg. Vol. 1. The Principles of Hypnotherapy. Published by Grune and Stratton, 1948.

The early history of hypnosis is retold and its gradual or not so gradual elevation or merger with more recent fields of mental influences are told once more. But the author goes into the actual utilization of the art and gives lessons—not so simple ones either—for the reader. The electric recorder is utilized for sources of information for the stenographer and the reader has a front row seat throughout. Now, the physician in practice with only hard feelings toward hypnosis will either not read this book, nor Volume II; or will just say Bunk; or the physician in practice will have an open mind and seek another mode of approach to the problems of his patient. If he has the special groups of characteristics required of a practitioner of hypnosis,

he will find this book of value. However, the admonition to seek experience under a master will be followed. Just how much the abbreviated pyschotherapeutic technics, particularly the seminarcotic state produced by the barbiturates, will be substituted for hypnosis can only be measured in time. Naturally, those expert in hypnosis have utilized this factor in their abbreviated technic and the name hypnoanalysis has been given to the combined art.

Dr. Wohlberg says in his preface Hypnosis—must not be regarded as a cure-all. The list of applications includes anxiety neurosis, conversion hystery, anxiety hysteria, compulsion neurosis, psychosomatic conditions, character disorders, alcoholism, psychosis, and miscellaneous conditions. The last includes hypnosis in dentistry, obstetrics and surgery.

The final chapter in this volume is on Dangers, Limitations and Failures of Hypnosis. In effect, this is a review of the entire matter and a prelude to Volume Two—completely transcribed case histories. Exactly how it's done!

Syphilis

Racial Variations in Immunity to Syphilis: By Chester North Frazier and Li Hung-Chiung.

No team more fitted for the work as outlined so briefly in the title could have assumed this work. The authors have had a wide experience in China, the locale of one of their greatest studies. Their experiences in North America plus the tremendous storehouse of information secured from the might center at John Hopkins offered them an unusual opportunity. The physician, the sociologist, the biologist must review the data for himself. Of course, general impressions and probably misimpressions are frevalent. The Chinese syphilis is different from the same disease in the white or Negro comes to mind. It probably is—but the reasons therefor are not easily established. Syphilis in man and woman, whether Chinese, white or Negro is different. The nutrition of the Chinese in his native China differs from the nutrition of the white and Negro in Baltimore as the nutrition of the two races differ in the same community.

Extraneous factors as endemic malaria and other diseases claimed to have an influence on paresis among syphilitics are considered. Malaria is a minor problem in Peiping where the authors did their longest statistical studies.

No mention was found in the text on conditions on the Panama Canal Zone. Here the peoples of the three races—Chinese, white and Negro live in substantially the same climate, about the same nutritional level, and subject to the same diseases including malaria. The serology done at the same laboratory, the clinical examinations performed in the same standard hospitals and the autopsies made by the same pathologists would have given most stimulating comparisons with the studies half across the world as are Baltimore and Peiping.

But syphilis is syphilis the world over!

Diseases

Diseases of the Warm Climates: By Albert Dubois and Louis Van Den Berghe. Published by Grune and Stratton, 1948.

Of course the authors know and say right at the very beginning that no disease is really limited to warm countries—they make an exception of African trypanosomiasis because the tsetse fly has a limited locale. Hence, a review of this book of 400 pages brings to light diseases well known in non-tropical countries. Indeed, a few are almost endemic right in non-tropical New York City. For, one does have leprosy, various and sundry mycoses, granuloma venereaum and lymphogranuloma venereaum in our own counterpart of the tropics. For in truth, if the natives of Manhattan did not travel to the tropics, the tropics did come to Manhattan and continue to do so. The flying ships bring people and their disabilities in a few hours from the lands in the tropical suns to our own varied climate. And perhaps, the vectors and pests come with the people. The long journeys of long ago may have helped destroy the carriers among the insects. The flight at several hundred miles an hour permits an insect to survive a journey of thousands of miles.

Hence, this book designed for the specialists in tropical lands finds a field of usefulness far from the Belgium Coast. The authors have each visited our shores. The recent war and perhaps the next makes a knowledge of the diseases of the tropics and subtropics of import to all physicians. No book twice its length can serve as well as this one. It is 1948 in every respect. The utilization of streptomycin and the sulfones is given for those otherwise difficult if not impossible to cure diseases once thought to be limited to the tropics. Now there is hope for the leprous. Granuloma inguinale need not be a life long battle with the antimony compounds. Yaes yields to penicillin.

A chapter on the avitaminoses helps. The charts of formulas; the simple laboratory procedures outlined make the volume practical as well as informative.

The publishers have done an excellent job in the make up department.

Heart Disease

Diseases of the Heart. By Sir Thomas Lewis, M.D., London, England: Macmillan Co., 1948.

This classic is based upon the author's personal

experience with each of the common disease entities of the heart. It represents those aspects of cardiology personally observed by the author and proved to be true. Such a vast amount of knowledge is accumulated about human disease that the author has cut ruthlessly from older text-books. He dispenses with many trivial details and puts in their place something more substantial. The author has a remarkable gift of stripping a subject of its intricacies and redundances, of unnecessary technical terms, named signs and trite phrases that stifle medicine. Indeed, there is a proper perspective of values without placing undue weight on any subject because of its novelty or personal interest. There is no overemphasis of electrocardiography, radiography or orthodiagrams. The chief emphasis has fallen upon physical signs within the immediate reach of all. The arrangement is in natural and logical sequence rather than in terms of disconnected facts. There is an abundant opportunity in the study of patients for the exercise of thought else the system of teaching neglects to foster such processes of reasoning. The underlying keynote in the book is recognition of the law that there is but one cause for one effect and one common state for a whole group of symptoms. The greatest emphasis is upon symptoms of disease due to faults in function, not of structure. Consequently, the arrangement is functional rather than anatomic. The book is a delightful essay, yet practical, informative and vivid.

Children's Eyes

Diseases of Children's Eyes. By JAMES HAMILTON DOGGART, M.D., M.A., St. Louis, Mo.: The C. V. Mosby Co., 1947.

This book is the first of its kind to unravel eye difficulties of infants and children. A normal newborn's eyes are nearly three-quarters developed, hence the physical signs of outstanding disease in children resemble those in adults. Moreover, the eye examination is the same for patients of all ages. Nevertheless, there are certain elements of difficulty peculiar to the practice of ophthalmology among infants and children since we must depend on a history furnished by parents untrained in observation. We cannot obtain facts gleaned from the ordinary subjective tests applicable to adults. We cannot use elaborate methods such as slit lamp microscopy in examining children. We must be speedy and be content with a fleeting glimpse of the eye structures involved.

The first chapter offers the principles of eye examination in children and their practical application in everyday practice. Subsequent chapters survey the anatomy and physiology of the eye with a view towards clinical application. There is an excellent chapter on the development of the eye and its adnexa, knowledge of which has been recently enriched by experimental studies of oviparous animals. Thus it has been found that certain ocular deformities can be produced by extremes of heat, cold, oxygen deprivation, vitamins or exposure to irradiation. Infantile cataract has been found to be the by-product of German measles affecting the mother during pregnancy. The entire array of developmental errors of the eye and related structure is presented descriptively and graphically with great clarity. Congenital abnormalities of individual structures of the eyeball are divided into these accessible to external examination and these are not. Acquired ocular disorders are presented as complications of systemic disease throughout growth and development. Finally, each component of the eye is considered in terms of disease entities from the standpoint of mechanism and management with essential common-sense utilization of accepted modern forms of treatment. The book is an invaluable addition to the library of practitioner and pediatrician.

Internal Disorders

Skin Manifestations of Internal Disorders. By KURT WIENER, M.D. The C. V. Mosby Company, 1947.

Before the advent of modern diagnostic methods clinicians knew how to diagnose systemic disorders from the skin. Most of these observations are scattered in the older literature. The term "skin manifestations" is better expressed by the term dermadromes. Most branches of medicine are embodied in this remarkable monograph with the exception of syphilitic dermatoses and allergic and nutritional dermatoses of infants. Nevertheless, the book is an integrated unit bringing dermatology into internal medicine and vice versa for the mutual benefit of each specialty. The book reveals the various dermadromes of most of the systemic infections including the rarities; of chemical poisoning; of the circulatory, endocrine, metabolic, hematopoietic, nervous, respiratory and digestive systems respectively. Each disease is introduced by a discussion of the systemic disease and its characteristic dermadromes, well illustrated and documented. Wherever feasible the terapeutic procedure formulated is not only from the dermatological but from the systemic standpoint. While there is a wealth of material gathered from the world literature the focusing of any disease entity from a particular standpoint tends to distort the systemic disease at the expense of the dermadrome. Nevertheless the author has fulfilled his purpose by bringing to the fore many a surface phenomenon in medicine which conceals deep-seated disease. For example: an early diabetes from an inconspicious tan of carotenia; the estimation of a date of a heart attack from the position of the cross furrows on the fingernails; the suggestion of Addison's Disease by the pigmented palmar creases of an individual who complains of chronic fatigue; the intimation of pregnancy of a young woman who objects to the recent development of skin tags on her

neck. Such diagnostic feats are a great source of satisfaction and this book enables such quick correlation. It is a reference volume indispensable for the student, practitioner and consultant in internal medicine.

Psychiatry

Psychiatry in General Practice. By MELVIN W. THORNER, M.D. Assistant Professor of Neurology, Graduate School of Medicne, University of Pennsylvania. 659 pages, illustrated, 1948, $8.00.

This is a new type of book on psychiatry. It is written expressly for the general practitioner, and for that reason is shorn entirely of all psychiatric jargon and terminology which serve only to confuse the medical man who is not trained in psychiatry. It serves its purpose most admirably. It is written in clear, simple fashion so that it can be understood by any medical man, no matter whether he is a general practitioner or a specialist in some branch in medicine other than neuropsychiatry.

This book deals not with psychiatric cases in abstract fashion but with people, all sorts and kinds of people who have deviated from what we call the normal. The author groups his material under such thought-provoking chapter headings as: Dull People, Intelligent People. People and Sex, Confused People Queer People, Dreamy People, Unhappy People, Older People, etc.

Most of the text consists of complete case histories, each written in a very entertaining and instructive manner. The method of instruction is thus mostly clinical. Treatment is discussed concisely and definite, practical advice is given such as that the general practitioner may use in his own daily practice in dealing with emotionally disturbed people. Psychotherapy, shock therapy, physiotherapy, chemotherapy and surgical therapy are discussed in terms that are readily grasped and understood. This is one of the very best texts recommended for the use of the general practitioner.

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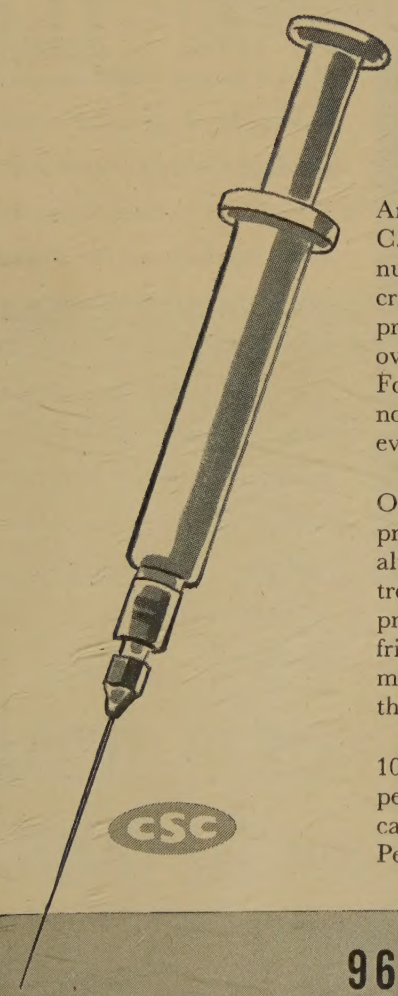

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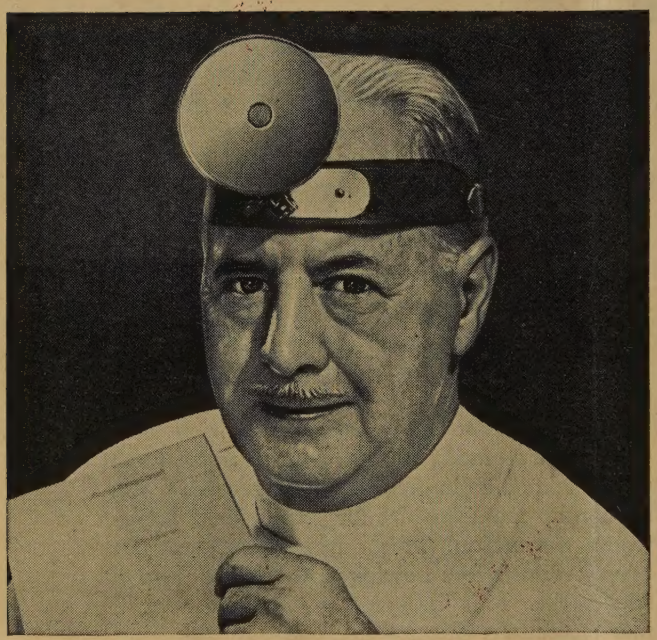

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